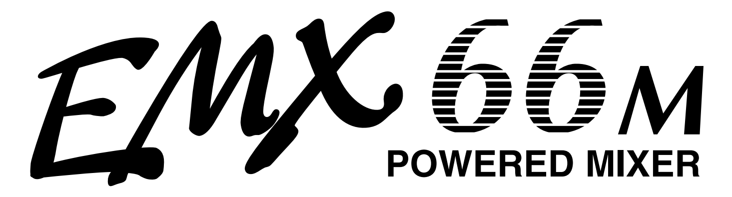


POWERED MIXER

SERVICE MANUAL

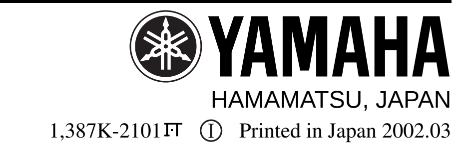


EMX66M

• OPTION
RK-88 RACK MOUNT KIT

■ CONTENTS

This document is printed on chlorine free (ECF) paper with soy ink.



HAMAMATSU, JAPAN

PA 011626

EMX66M 20020325-75000
RK88 20020325-2500

1,387K-2101 FT ① Printed in Japan 2002.03

IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to per form as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: This presentation or sale of this manual to any individual or firm does not constitute authorization, certification, recognition of any applicable technical capabilities, or establish a principal-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefor, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical / electronic and / or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and / or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL / ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHAT SO EVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder / flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

WARNING: THIS APPARATUS MUST BE EARTHED

IMPORTANT: The wires in this main lead are coloured in accordance with the following code:

GREEN-AND-YELLOW: EARTH
BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the main lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The GREEN-and-YELLOW wire must be connected to the terminal in the plug that is marked with the letter E or the safety earth symbol (or coloured GREEN or GREEN-and-YELLOW).

The BLUE wire must be connected to the terminal that is marked with the letter N (or coloured BLACK).

The BROWN wire must be connected to the terminal that is marked with the letter L (or coloured RED).

This applies only to products distributed by Yamaha Kemble Music (U. K.) Ltd.

■ WARNING

Components having special characteristics are marked ⚠ and must be replaced with parts having specification equal to those originally installed.

SPECIFICATIONS

● General specifications

Maximum output power	300 W + 300 W/4Ω @0.5% THD at 1 kHz (SPEAKERS OUT A, B) 205 W + 205 W/8Ω @0.5% THD at 1 kHz (SPEAKERS OUT A, B) 600 W/8Ω @0.5% THD at 1 kHz (BRIDGE)	
Frequency response	20 Hz–20 kHz +1 dB, –3 dB @1 W output into 8Ω (SPEAKERS OUT) 20 Hz–20 kHz +1 dB, –3 dB @+4 dB output into 10 kΩ (MAIN OUT, MONITOR OUT, EFFECT SEND)	
Total harmonic distortion	Less than 0.5% @20 Hz–20 kHz, 150 W output into 4Ω (SPEAKERS OUT A, B) Less than 0.3% @20 Hz–20 kHz, +14 dB output into 10 kΩ (MAIN OUT, MONITOR OUT, EFFECT OUT)	
Hum & noise (Average, Rs=150Ω) (with 20 Hz–20 kHz BPF)	–124 dB equivalent input noise, –65 dB residual output noise (SPEAKERS OUT)	
	–88 dB residual output noise (MAIN OUT, MONITOR OUT)	
	–79 dB (83 dB S/N) MAIN OUT, MONITOR OUT	Master level control at nominal level and all channel level controls at minimum.
	–69 dB (73 dB S/N) MAIN OUT, MONITOR OUT	Master level control at nominal level and 1 channel level control at nominal level.
	–75 dB (79 dB S/N) EFFECT SEND	All channel level controls at minimum.
	–69 dB (73 dB S/N) EFFECT SEND	1 channel level control at nominal level.
Maximum voltage gain	88 dB CH IN (Low-Z) to SPEAKERS OUT (CH1–4) 66 dB CH IN (Low-Z) to MAIN OUT, MONITOR OUT (CH1–4) 72 dB CH IN (Low-Z) to EFFECT OUT (CH1–4) 48 dB CH IN (Low-Z) to REC OUT (CH1–4) 56 dB CH IN (Hi-Z) to MAIN OUT, MONITOR OUT (CH1–4) 26 dB AUX IN to MAIN OUT 24 dB 2TR IN to MAIN OUT 66 dB MIC IN to MAIN OUT, MONITOR OUT (CH5•6) 26 dB LINE IN to MAIN OUT, MONITOR OUT (CH5) 46 dB Super Hi-Z IN to MAIN OUT, MONITOR OUT (CH6)	
Crosstalk at 1 kHz	65 dB adjacent input, 65 dB input to output	
Input channel equalization	±15 dB Maximum HIGH 10 kHz shelving* MID 2.5 kHz peaking LOW 100 Hz shelving* *Turn over/roll-off frequency of shelving: 3 dB below maximum variable level.	
Meters	5 POINTS LED METER (–10, –5, 0, +3, +6 dB) (MAIN OUT, MONITOR OUT)	
Graphic equalizer	7 bands (125, 250, 500, 1 k, 2 k, 4 k, 8 kHz), ±12 dB Maximum (MAIN OUT, MONITOR OUT)	
Internal digital effect	8 programs (VO.ECHO 1, VO.ECHO 2, VO.REVERB 1, VO.REVERB 2, HALL 1, HALL 2, ROOM, PLATE)	
Phantom power	+15 V is supplied to electrically balanced inputs for powering condenser microphones via 2.4 kΩ current limiting/isolation resisters.	
Limiter	Comp. : THD≥0.5% (SPEAKERS OUT)	
LIMIT indicators	Turns on. : THD≥0.5% (SPEAKERS OUT)	
Protection Circuit (Power Amp.)	POWER Switch on/off Mute, DC Detection, Temp (Heatsink Temp≥90˚C)	
Foot switch (FC5)	DIGITAL EFFECT MUTE : on/off	
Optional accessories	RK-88, FC5	
Power requirement/Power consumption	USA and Canada 120 V AC 60 Hz/250 W Europe 230 V AC 50 Hz/300 W Other 240 V AC 50 Hz/300 W	
Dimensions (WxHxD)	482 x 305 x 328 mm	
Weight	15 kg	
Supplied accessories	AC power cord, Owner's Manual	

- 0 dB=0.775 Vrms

● Input specificaitons

Input connectors	PAD	Actual load impedance	Nominal impedance	Input level			Connector type
				Sensitivity[1]	Nominal level	Max. before cliping	
CH INPUT (Low-Z) (CH1–4)	OFF	3 kΩ	50–600Ω Mics	–62 dB (0.616 mV)	–50 dB (2.45 mV)	–20 dB (77.5 mV)	XLR-3-31 type[2]
	ON		600Ω Lines	–32 dB (19.5 mV)	–20 dB (77.5 mV)	+10 dB (2.45 V)	
CH INPUT (Hi-Z) (CH1–4)	OFF	10 kΩ	50–600Ω Mics	–52 dB (1.95 mV)	–40 dB (7.75 mV)	–10 dB (245 mV)	Phone jack (TRS)[2]
	ON		600Ω Lines	–22 dB (61.6 mV)	–10 dB (245 mV)	+20 dB (7.75 V)	
MIC INPUT (CH5•6)		3 kΩ	50–600Ω Mics	–62 dB (0.616 mV)	–50 dB (2.45 mV)	–20 dB (77.5 mV)	XLR-3-31 type[2]
LINE INPUT (CH5) (1, 2)		10 kΩ	600Ω Lines	–22 dB (61.6 mV)	–10 dB (245 mV)	+20 dB (7.75 V)	Phone jack[3]
Super Hi-Z (CH6) (1, 2)		470 kΩ	1 kΩ	–42 dB (6.16 mV)	–30 dB (24.5 mV)	0 dB (0.775 V)	Phone jack[3]
AUX IN		10 kΩ	600Ω Lines	–22 dB (61.6 mV)	–10 dB (245 mV)	+20 dB (7.75 V)	Phone jack[3]
2TR IN (1, 2)		10 kΩ	600Ω Lines	–22 dBV (79.4 mV)	–10 dBV (316 mV)	+17.8 dBV (7.76 V)	RCA phono jack[3]

1. Sensitivity is the lowest level that can produce an output of +4 dB (1.23 V) or the nominal output level when the unit is set at maximum gain. (All level controls are at maximum position.)
2. Balanced
3. Unbalanced
- 0 dB=0.775 Vrms, 0 dBV=1 Vrms.

● Output specificaitons

Output connectors	Actual source impedance	Nominal impedance	Output level		Connector type
			Nominal	Max. before cliping	
POWER AMP OUT (1•2) (A, B)	0.1Ω	4/8Ω Speaker	60 W/4Ω	(300 W/4Ω)	Phone jack
BRIDGE OUT	0.1Ω	8Ω Speaker	120 W/8Ω	(600 W/8Ω)	Phone jack
MAIN OUT	600Ω	10 kΩ Lines	+4 dB (1.23 V)	+20 dB (7.75 V)	Phone jack
MONITOR OUT	600Ω	10 kΩ Lines	+4 dB (1.23 V)	+20 dB (7.75 V)	Phone jack
EFFECT OUT	600Ω	10 kΩ Lines	+4 dB (1.23 V)	+20 dB (7.75 V)	Phone jack
REC OUT (1, 2)	600Ω	10 kΩ Lines	–10 dBV (316 mV)	+10 dBV (3.16 V)	RCA phono jack

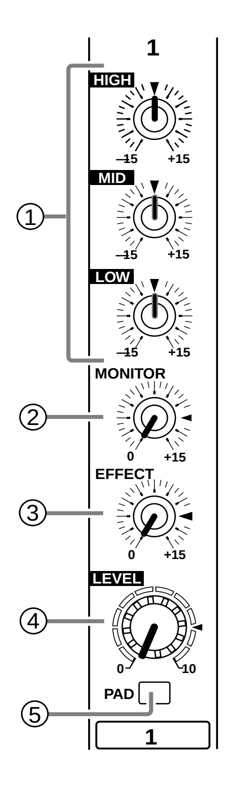
- All output jacks are unbalanced.
- 0 dB=0.775 Vrms, 0 dBV=1 Vrms.

PANEL LAYOUT

CONTROL PANEL

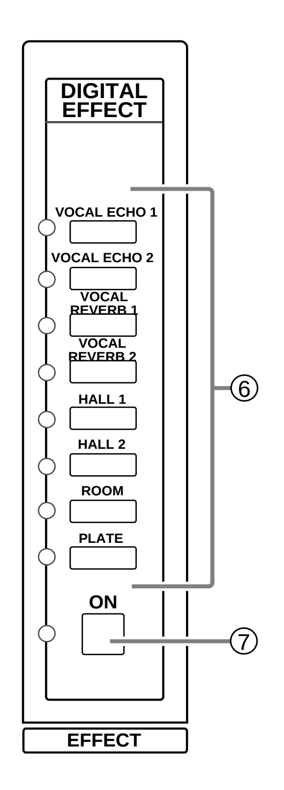
1. CONTROL SECTION

• Channel Control



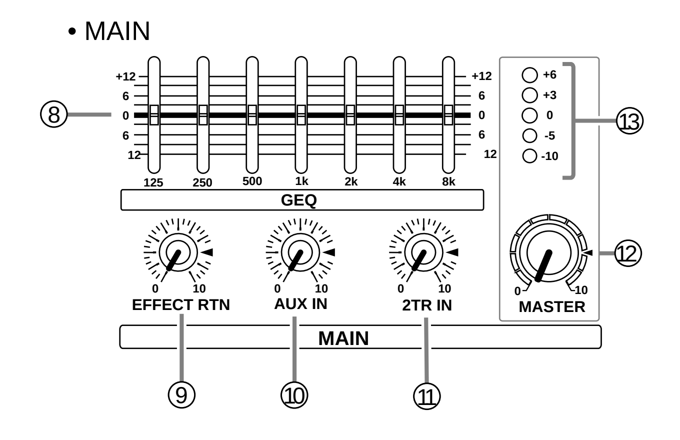
① Equalizer (HIGH, MID, LOW)
② MONITOR control
③ EFFECT control
④ LEVEL control
⑤ PAD switch (CH1-4)

• Digital Effect



⑥ EFFECT select switch
⑦ ON switch, indicator

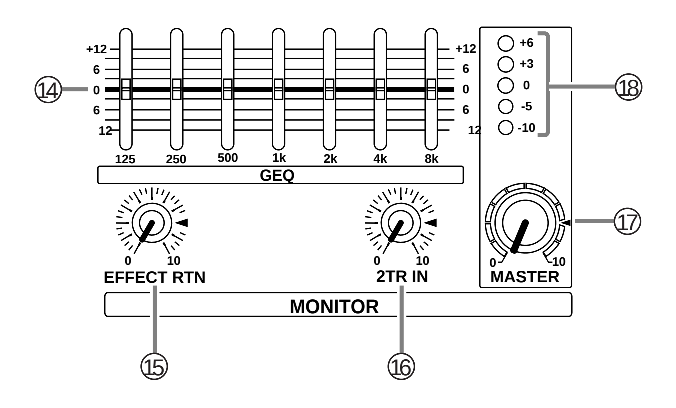
• MAIN



⑧ Graphic Equalizer
⑨ EFFECT RTN control
⑩ AUX IN control
⑪ 2TR IN control
⑫ MASTER control
⑬ Peak Level Indicator

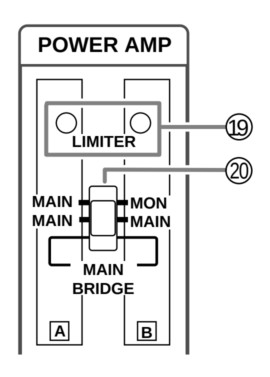


• MONITOR



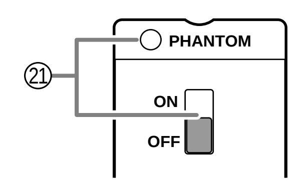
⑭ Graphic Equalizer
⑮ EFFECT RTN control
⑯ 2TR IN control
⑰ MASTER control
⑱ Peak Level Indicator

• POWER AMP



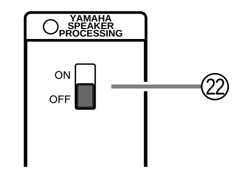
⑲ LIMITER indicator
⑳ POWER AMP select switch

• PHANTOM switch, indicator



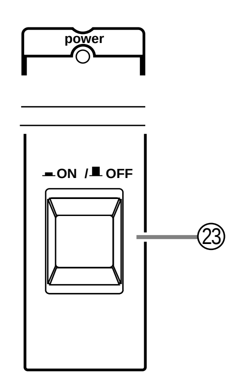
㉑ PHANTOM ON/OFF switch, indicator

• YAMAHA SPEAKER PROCESSING



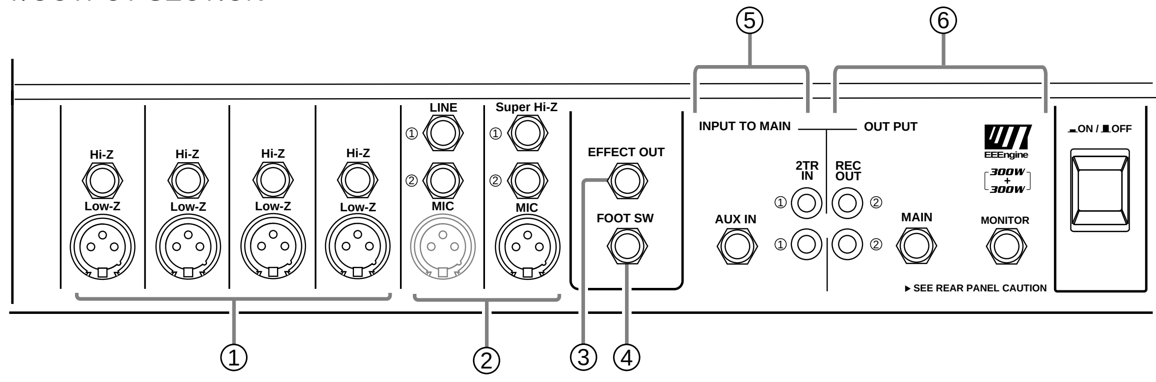
㉒ ON/OFF switchÅ@

• POWER switch, indicator



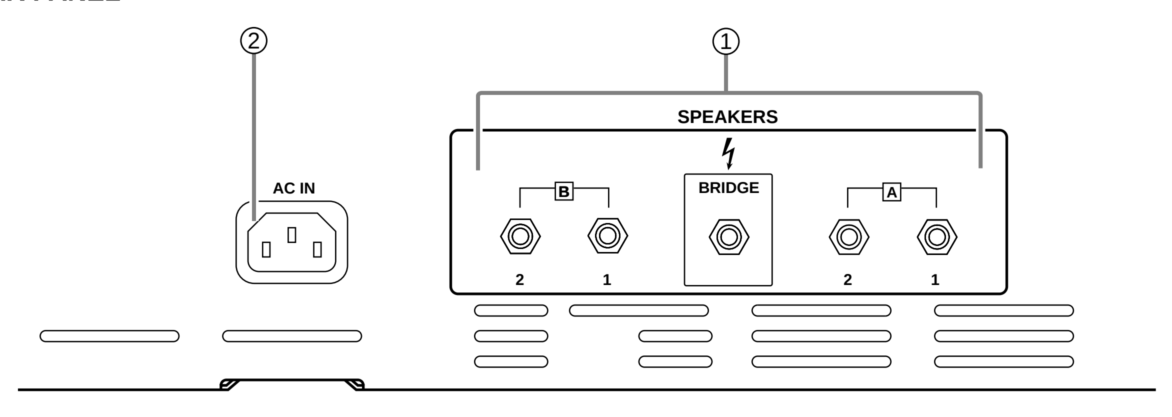
㉓ POWER ON/OFF switch, indicator

2. INPUT/OUTPUT SECTION



① INPUT terminal (Hi-Z, Low-Z) (CH1-4)
② INPUT terminal (LINE, MIC, Super Hi-Z) (CH5-6)
③ EFFECT OUT terminal
④ FOOT SW terminal
⑤ INPUT TO MAIN terminal (AUX IN, 2TR IN)
⑥ OUTPUT terminal (REC OUT, MAIN, MONITOR)

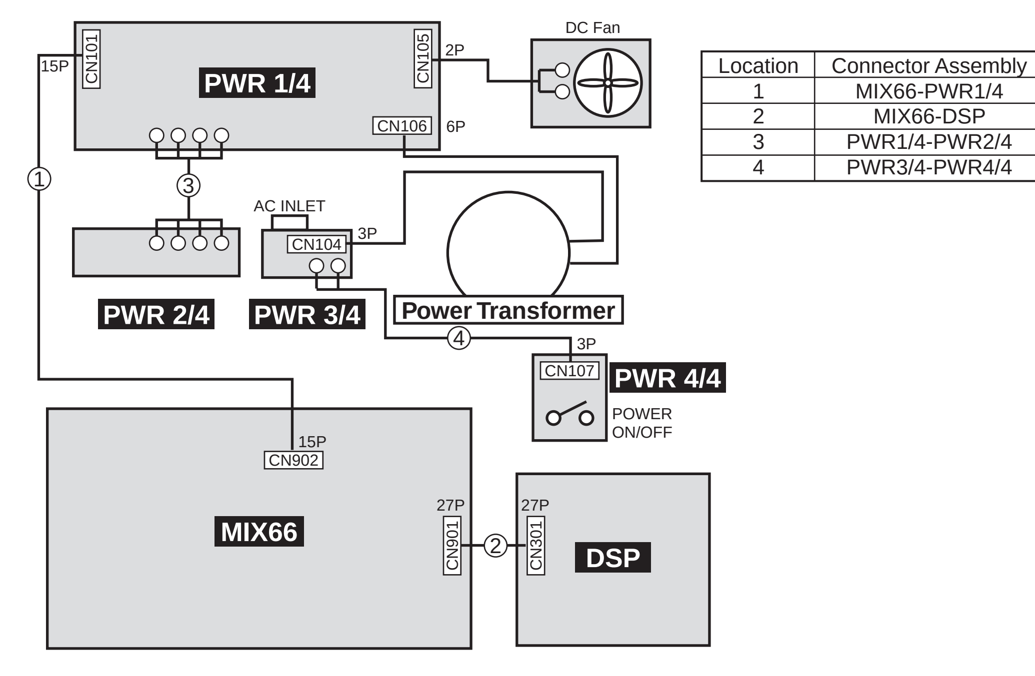
● REAR PANEL



① SPEAKERS terminal
② AC IN socket

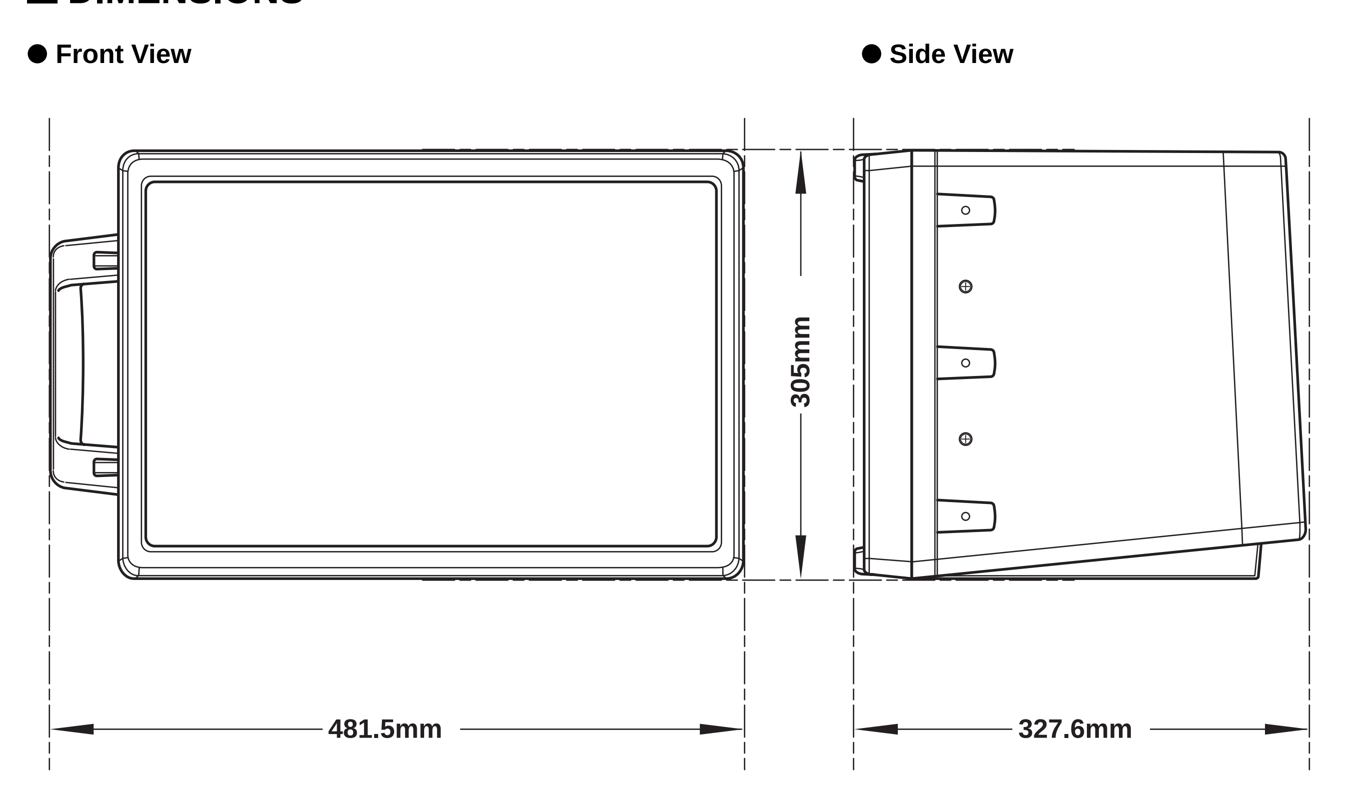
■ CIRCUIT BOARD LAYOUT & WIRING

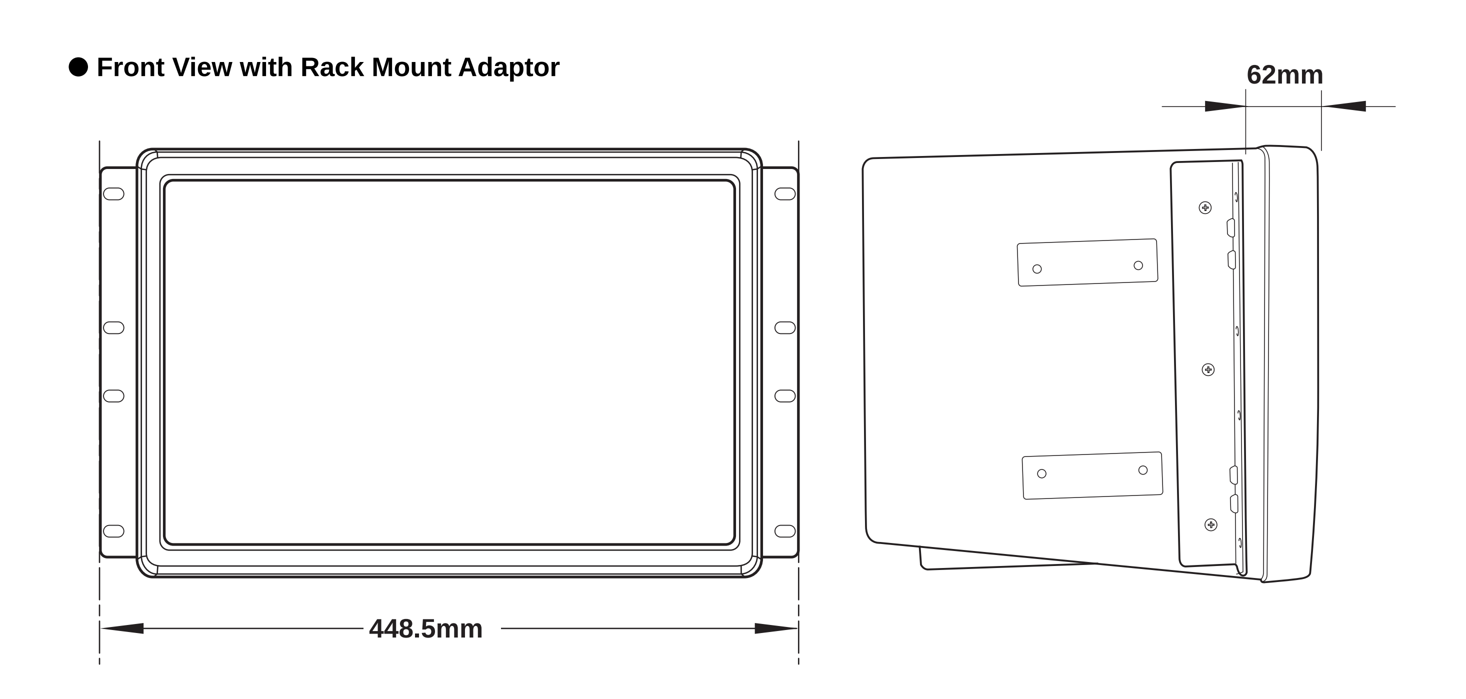
PWR 1/4
PWR 2/4
PWR 3/4
Power Transformer
PWR 4/4
MIX66
DSP



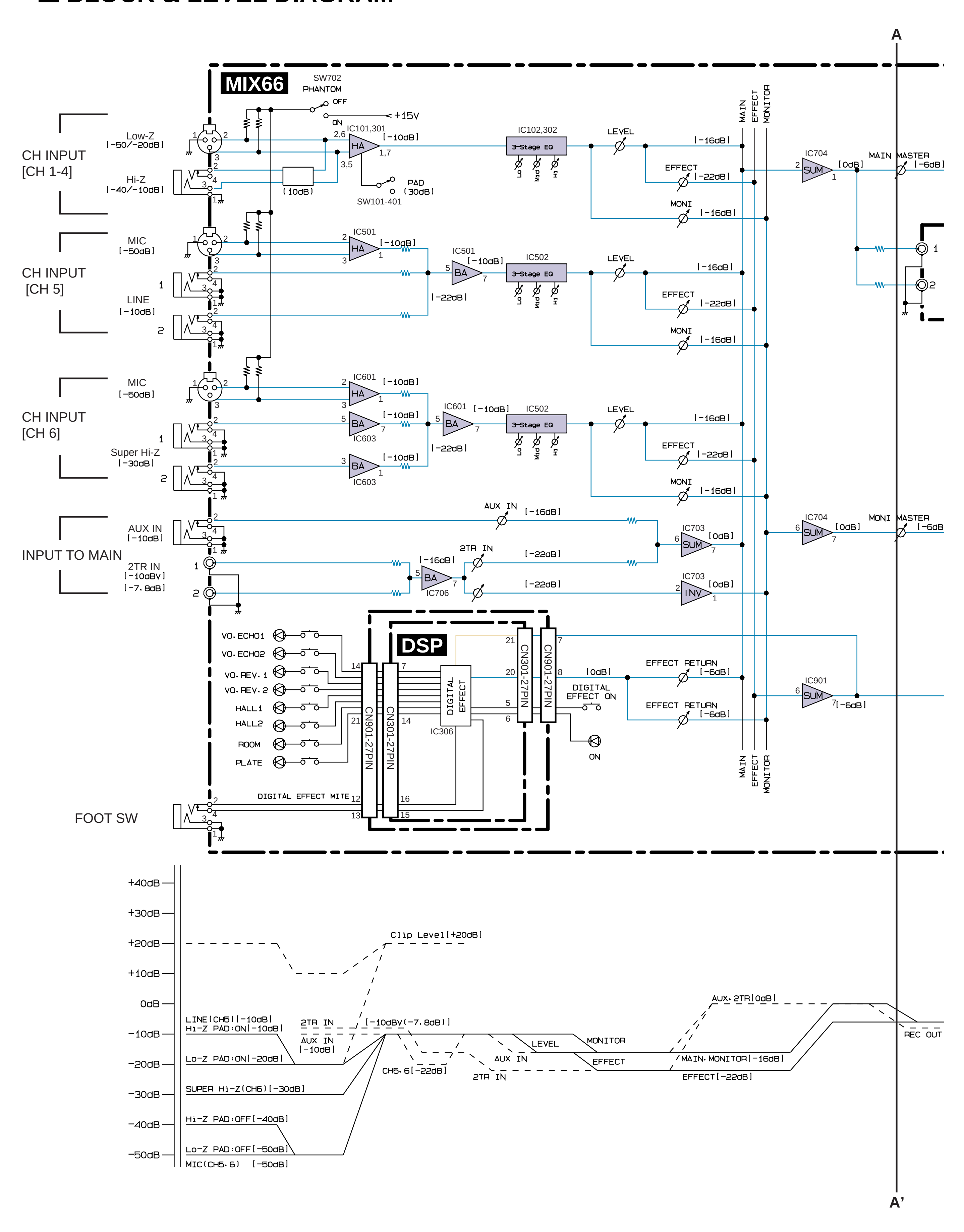
Location	Connector Assembly	Remarks	Parts No.
1	MIX66-PWR1/4	24185&2426 15P L=700	V842620
2	MIX66-DSP	100mm P=1.25	MF12710
3	PWR1/4-PWR2/4	B&B4P	(V827270)
4	PWR3/4-PWR4/4	PSW	V827290

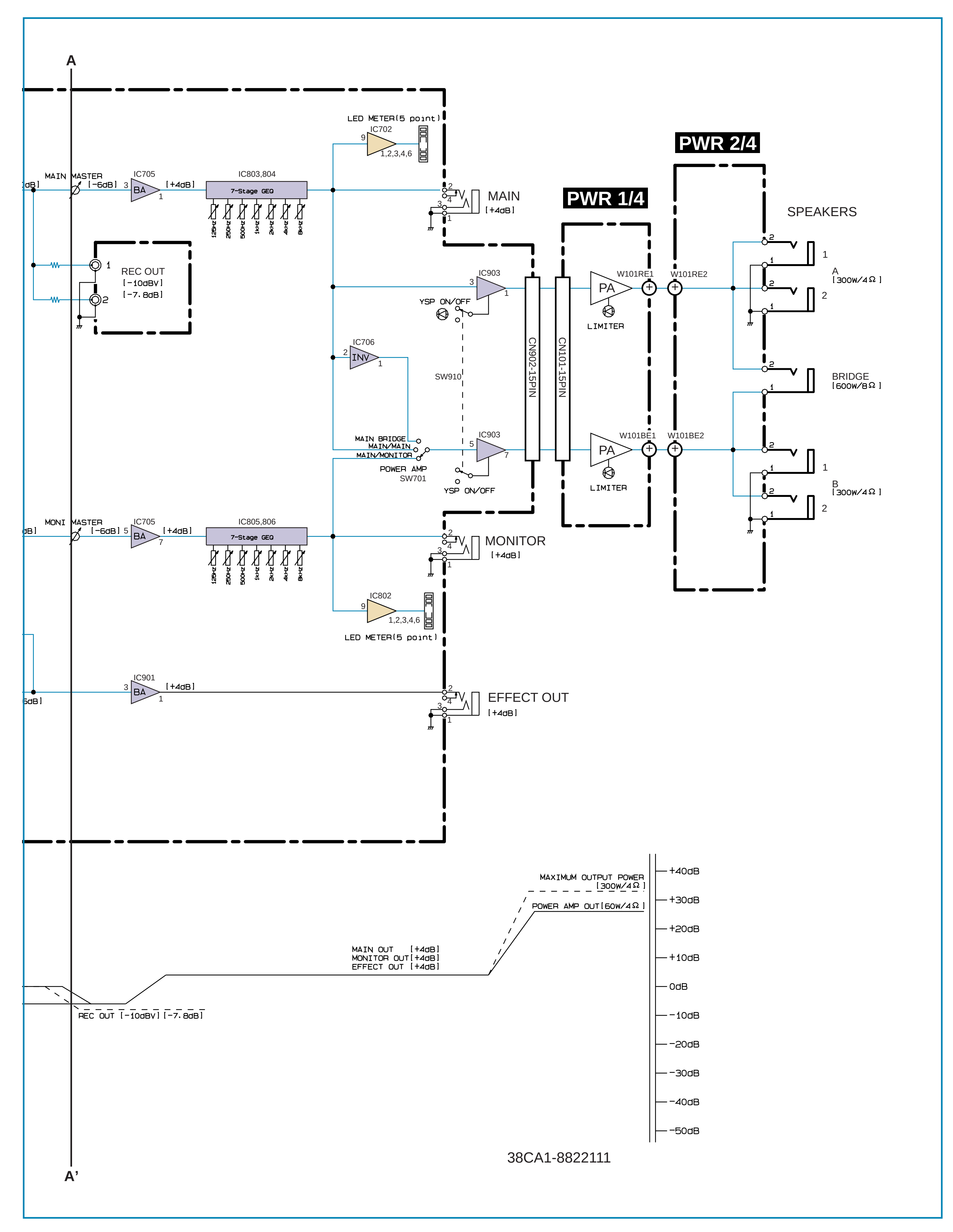
DIMENSIONS


● Front View
● Side View
305mm
481.5mm
327.6mm


● Front View with Rack Mount Adaptor
62mm
448.5mm

■ BLOCK & LEVEL DIAGRAM




A
MAIN MASTER
[-6dB]
IC705
BA
[+4dB]
IC803,804
7-Stage GEQ
LED METER(5 point)
IC702
1,2,3,4,6
MAIN
[+4dB]
REC OUT
[-10dBV]
[-7.8dB]
IC903
YSP ON/OFF
IC706
INV
SW910
MAIN BRIDGE
MAIN/MAIN
MAIN/MONITOR
POWER AMP
SW701
CN902-15PIN
CN101-15PIN
PWR 1/4
PWR 2/4
PA
LIMITER
W101RE1
W101RE2
W101BE1
W101BE2
SPEAKERS
A
[300W/4Ω]
BRIDGE
[600W/8Ω]
B
[300W/4Ω]
MONI MASTER
IC805,806
MONITOR
IC802
IC901
EFFECT OUT
MAXIMUM OUTPUT POWER
[300W/4Ω]
POWER AMP OUT[60W/4Ω]
MAIN OUT [+4dB]
MONITOR OUT[+4dB]
EFFECT OUT [+4dB]
REC OUT [-10dBV][-7.8dB]
+40dB
+30dB
+20dB
+10dB
0dB
-10dB
-20dB
-30dB
-40dB
-50dB
38CA1-8822111
A'

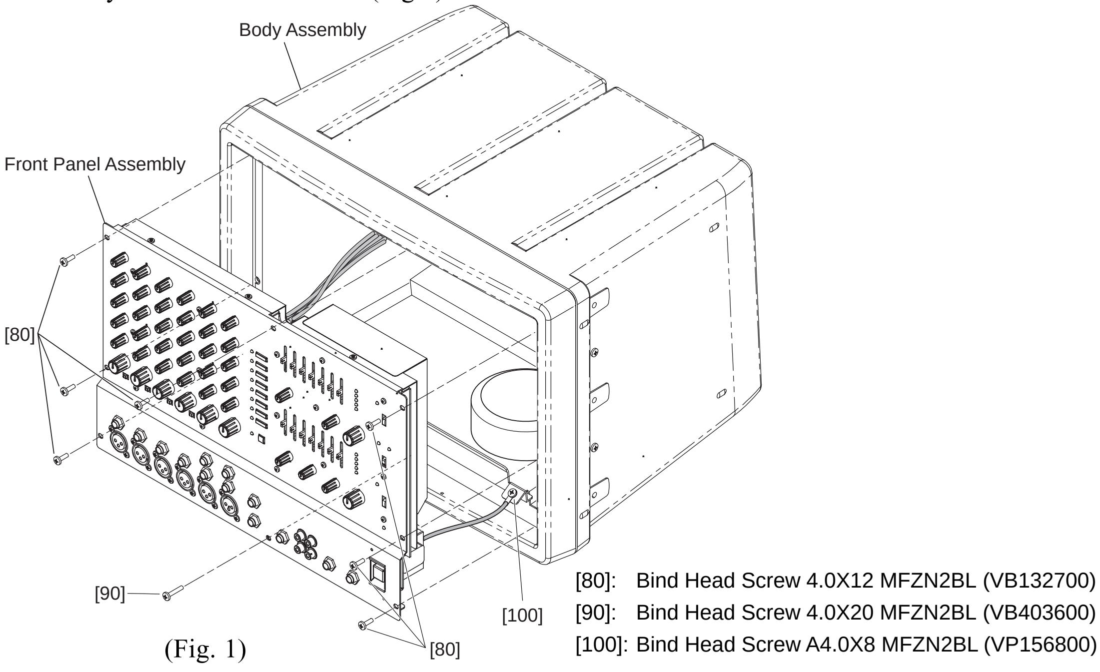
■ DISASSEMBLY PROCEDURE

1. Front Panel Assembly (Time required: about 3 min)

1-1. Remove the seven (7) screws marked [80] and the screw marked [90]. (Fig.1)

1-2. Hold volume knobs and pull the panel to the front. (Fig.1)

1-3. Remove the screw marked [100]. The front panel assembly can then be removed. (Fig.1)



(Fig. 1)

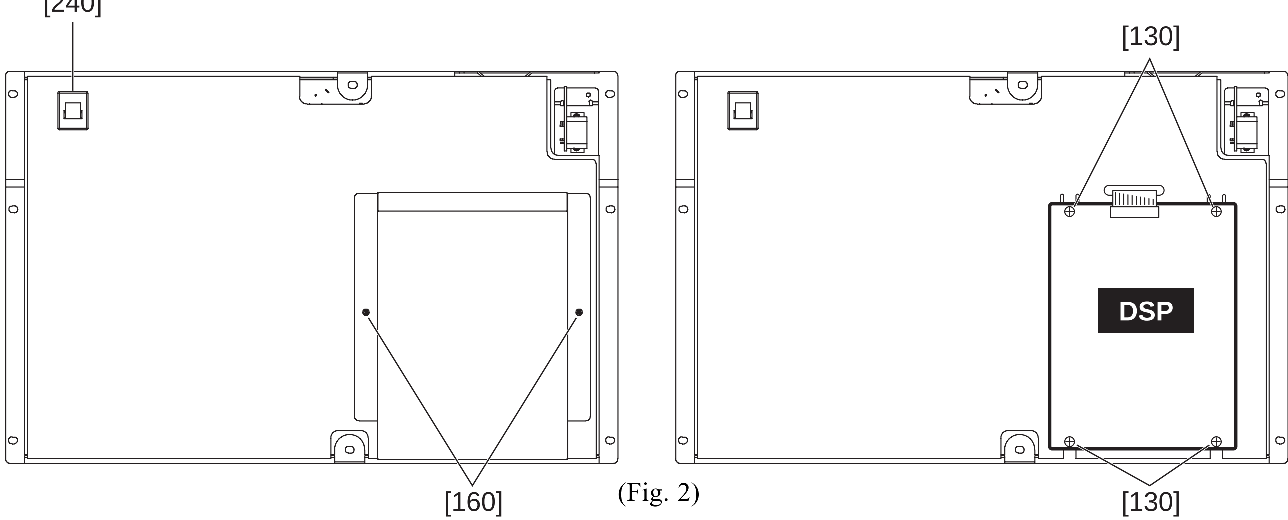
[80]: Bind Head Screw 4.0X12 MFZN2BL (VB132700)
[90]: Bind Head Screw 4.0X20 MFZN2BL (VB403600)
[100]: Bind Head Screw A4.0X8 MFZN2BL (VP156800)

2. DSP-ZFX Circuit Board (Time required: about 4 min)

2-1. Remove the front panel assembly. (See Procedure 1)

2-2. Remove the two (2) screws marked [160] to remove the shield case. (Fig.2)

2-3. Remove the four (4) screws marked [130]. The DSP-ZFX circuit board can then be removed. (Fig.2)



(Fig. 2)

[130]: Bind Head Tapping Screw-B 3.0X6 MFZN2BL (EP600230)
[160]: Bind Head Tapping Screw-B 3.0X6 MFZN2BL (EP600230)
[240]: Cord Binder TS-0708 KSS (VZ765100)

3. MIX66 Circuit Board
(Time required: about 18 min)

3-1. Remove the front panel assembly. (See Procedure 1)

3-2. Remove the cable from the cord binder marked [240]. (Fig.2)

3-3. Remove the shield case. (See Procedure 2-2)

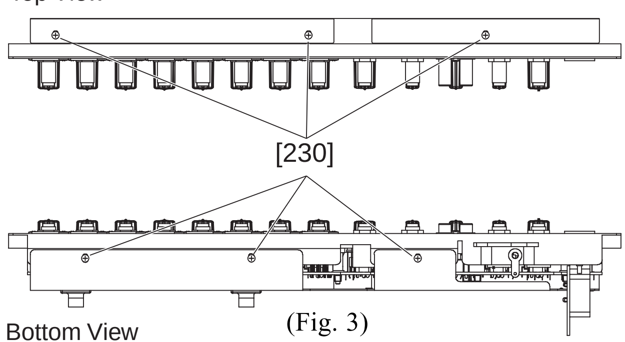
3-4. Pull out the connector assembly from CN301 on the DSP-ZFX circuit board. (Fig.4)

3-5. Remove the six (6) screws marked [230] to remove the shield plate. (Fig.3)

3-6. Remove the fifteen (15) screws marked [40], the thirteen (13) screws marked [41], and the thirteen (13) hexagonal nuts marked [A]. (Fig.5)

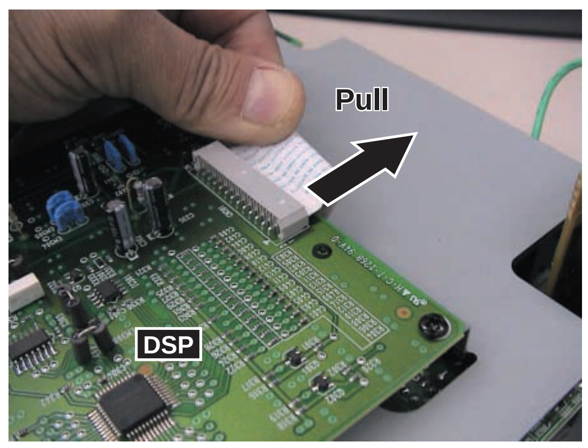
3-7. Remove the eighteen (18) knobs marked [50], eight (8) knobs marked [60], the nine (9) knobs marked [70], and the eight (8) knobs marked [80].
The mix66 circuit board can then be removed. (Fig.5)

Note: When placing the front panel assembly on the table, take care not to weight the PWR circuit board 4/4. (Fig.6)

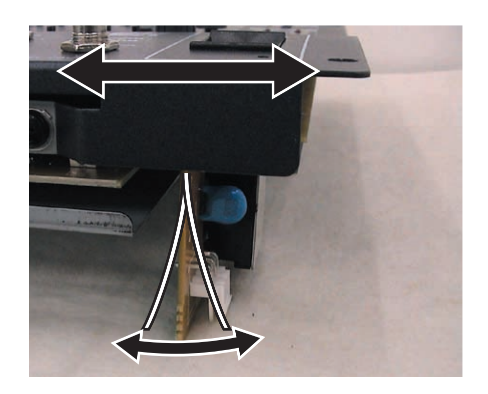


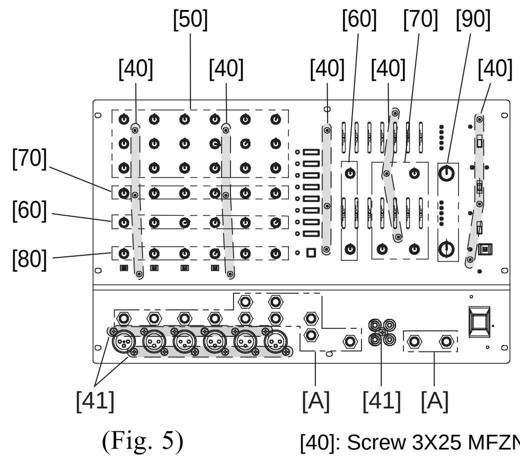
(Fig. 3)

[230] Head Tapping Screw-B 3.0X6 MFZN2BL (EP600230)



(Fig. 4)


(Fig. 6)



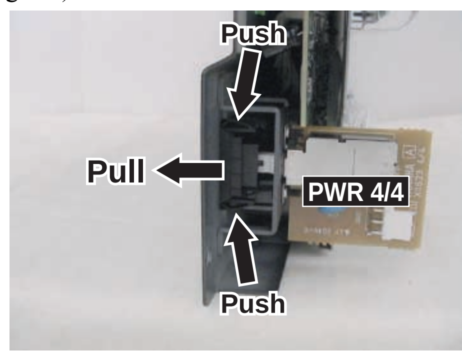
(Fig. 5)



[40]: Screw 3X25 MFZNBL (V3289800)
[41]: Bonding Tapping Screw-B 3.0X8 MFZN2BL (VN413300)
[50]: Knob GREEN/M-GRAY (V6225300)
[60]: Knob L-GRAY/M-GRAY (V6225600)
[70]: Knob BLUE/M-GRAY (V6225400)
[80]: Knob L-GRAY/D-GRAY (V6225700)
[90]: Bind Head Screw 3.0X8 MFZN2BL (VB659000)

4. PWR Circuit Board 4/4
(Time required: about 4 min)

4-1. Remove the front panel assembly. (See Procedure 1)
4-2. Pinch slightly the stopper of the power switch escutcheon with a plyer, and pull it to the front to remove. (Fig.7-1)
4-3. Remove the two (2) screws marked [90]. (Fig.7-2)
4-4. Remove the power switch knob marked [110]. The PWR circuit board 4/4 can then be removed. (Fig.7-2)



(Fig. 7-1)



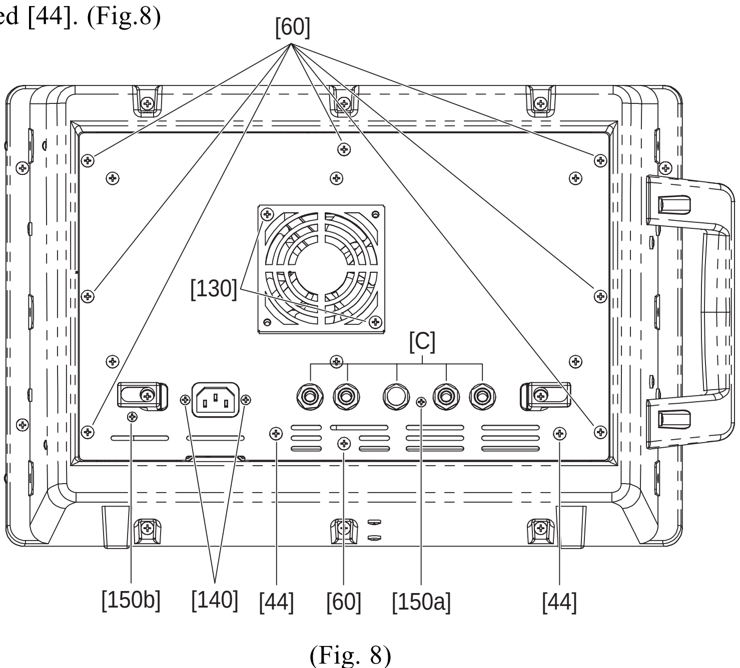
(Fig. 7-2)

[90]: Bind Head Screw 3.0X8 MFZN2BL (VB659000)

[110]: Power Switch Knob MX12/4 (VU859000)

5. Rear Panel Assembly
(Time required: about 2 min)

5-1. Remove the front panel assembly. (See Procedure 1)
5-2. Remove the eight (8) screws marked [60] and the two (2) screws marked [44]. (Fig.8)



(Fig. 8)

[44]: Bind Head Tapping Screw-B 4.0X8 MFZN2BL (EG340190)
[60]: Bind Head Screw 4.0X12 MFZN2BL (VB132700)
[130]: Bind Head Screw 4.0X30 MFZN2BL (VT229100)
[140]: Bind Head Tapping Screw-B 3.0X12 MFZN2BL (VQ074600)
[150]: Bonding Head Tapping Screw-B 3.0X8 MFZN2BL (VN413300)

5-3. Hold the cord holder and pull the rear panel to the front to remove. (Fig.9)

Note: When reinstalling, install the rear panel assembly and the front panel assembly in that order to connect the power supply connector easily.



(Fig. 9)

6. PWR Circuit Board 2/4
(Time required: about 4 min)

6-1. Remove the rear panel assembly. (See Procedure 5)

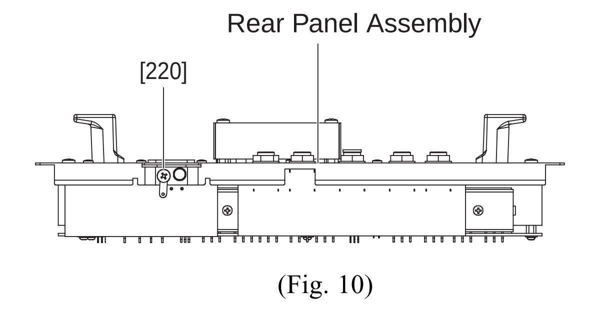
6-2. Remove the screw marked [150a] and the five (5) hexagonal nuts marked [C]. The PWR circuit board 2/4 can then be removed. (Fig.8)

7. PWR Circuit Board 3/4
(Time required: about 3 min)

7-1. Remove the rear panel assembly. (See Procedure 5)

7-2. Remove the two (2) screws marked [140] and the screw marked [150b]. (Fig.8)

7-3. Remove the screw marked [220]. The PWR circuit board 3/4 can then be removed. (Fig.10)

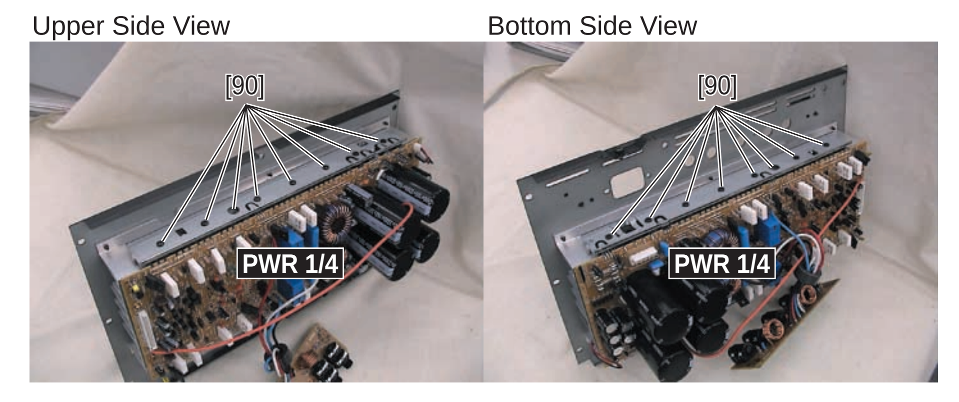


(Fig. 10)

[220]: Bind Head Screw A4.0X6 MFZN2BL (VP156800)

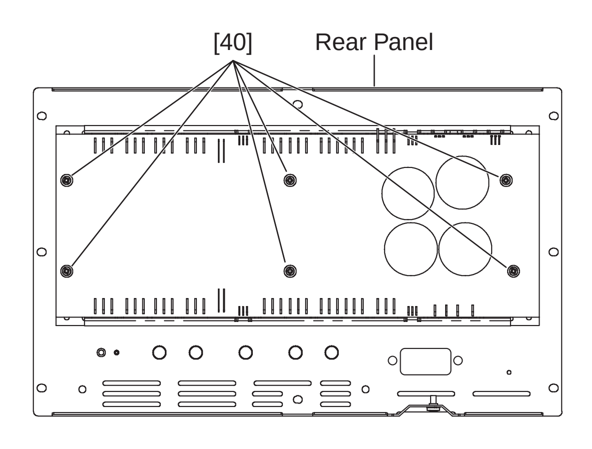
8. PWR Circuit Board 1/4
(Time required: about 10 min)

8-1. Remove the rear panel assembly. (See Procedure 5)
8-2. Remove the PWR circuit board 2/4. (See Procedure 6)
8-3. Remove the PWR circuit board 3/4. (See Procedure 7)
8-4. Remove the sixteen screws marked [90] to remove the TR holder A and the TR holder B. (Fig.11)
8-5. Remove the six (6) screws marked [40]. The PWR circuit board 1/4 can then be removed. (Fig.12)



(Fig. 11)

[90]: Bind Head Tapping Screw-B 3.0X12 MFZN2BL (VQ0746000)



(Fig. 12)

[40]: Bind Head Screw SP 3.0X8 MFZN2Y (EG330290)

9. Fan (Time required: about 3 min)

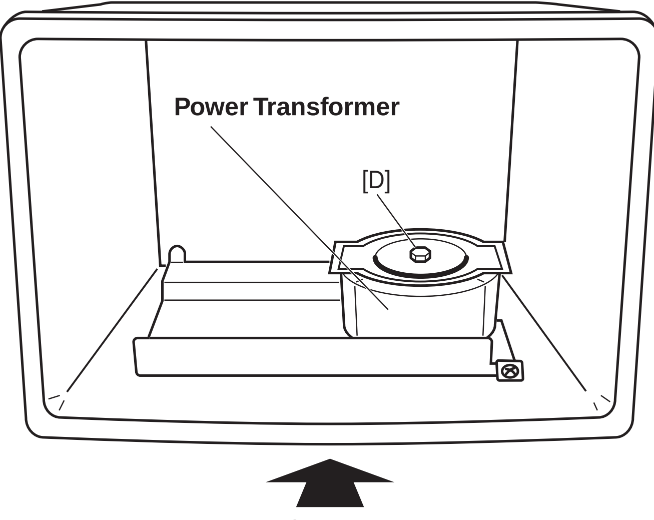
9-1. Remove the rear panel assembly. (See Procedure 5)

9-2. Remove the two (2) screws marked [130]. The fan can then be removed. (Fig.8)

10. Power Transformer (Time required: about 4 min)

10-1. Remove the front panel assembly. (See Procedure 1)

10-2. Remove the bolt marked [D]. The power transformer can then be removed. (Fig.13)



11. Front Frame (Time required: about 6 min)

11-1. Remove the front panel assembly. (See Procedure 1)

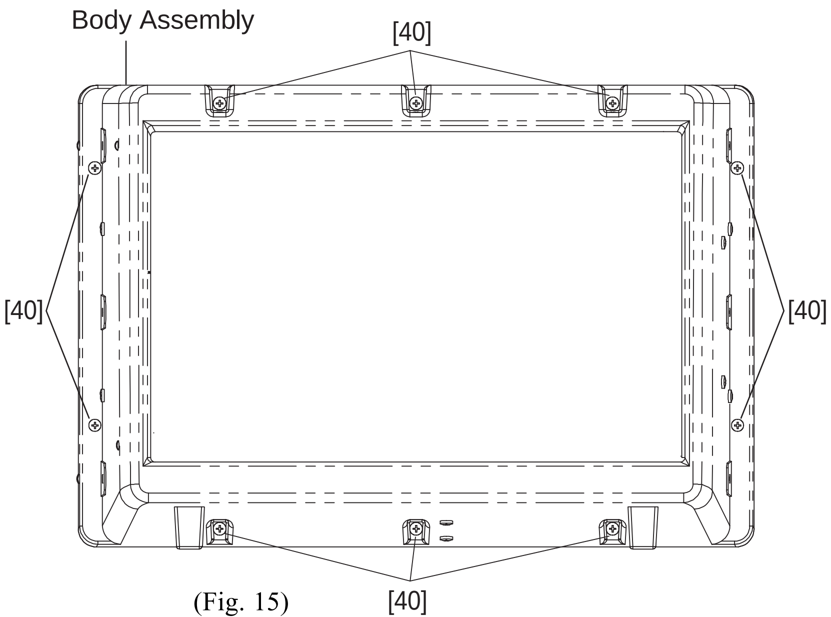
11-2. Remove the four (4) screws marked [50] to remove the handle assembly. (Fig.14)

11-3. Remove the ten (10) screws marked [40]. The front frame can then be removed. (Fig.15)



(Fig. 14)

[50]: Bind Head Screw 4.0X16 MFZN2BL (EG340110)



(Fig. 15)

[40]: Bind Head Tapping Screw-P 4.0X30 MFZN2BL (V8322700)

LSI PIN DESCRIPTION

• ZFX-2 (XY297A00) CPU

DSP-ZFX: IC306

PIN No.	NAME	I/O	FUNCTION
1	ED2	I/O	
2	ED3	I/O	
3	ED4	I/O	External Memory and I/O Data Bus
4	ED5	I/O	
5	ED6	I/O	
6	ED7	I/O	
7	VSS	S	Ground
8	VDD	S	Power Supply
9	CLKM0	I	Clock Mode
10	CLKM1	I	

	1	3	6	PLL BYPASS
CLKM0	0	1	0	1
CLKM1	0	0	1	1

PIN No.	NAME	I/O	FUNCTION
11	TMS	I	TAP(Test Access Port) Mode Select
12	TDI	I	TAP Data Input
13	TCK	I	TAP Clock
14	CLKIN	I	Master Clock
15	VSS	S	Ground
16	VDD	S	Power Supply
17	CLKO	O	Machine Clock Output
18	EA12/ED8	I/O	
19	EA13/ED9	I/O	External SRAM and ROM Address Bus/
20	EA14/ED10	I/O	External DRAM and I/O Data Bus
21	EA15/ED11	I/O	
22	VSS	S	Ground
23	VDD	S	Power Supply
24	EA16/ED12	I/O	
25	EA17/ED13	I/O	External SRAM and ROM Address Bus/
26	EA18/ES14	I/O	External DRAM and I/O Data Bus
27	EA19/ED15	I/O	
28	EA4/ED16	I/O	
29	EA5/ED17	I/O	External Memory Address Bus/ External I/O
30	EA6/ED18	I/O	Data Bus
31	EA7/ED19	I/O	
32	VSS	S	Ground
33	VDD	S	Power Supply
34	EA8/ED20	I/O	
35	EA9/ED21	I/O	External Memory Address Bus/ External I/O
36	EA10/ED22	I/O	Data Bus
37	EA11/ED23	I/O	
38	TEST0	I	
39	TEST1	I	Test Mode Control
40	TEST2	I	
41	TEST3	I	
42	/BIO	I	Separate Control Input
43	/INT1	I	Interrupt 1
44	ARBC1	I	Audio Data Receive Unit 1 bit Clock
45	ARBC2	I	Audio Data Receive Unit 2 bit Clock
46	AX1	O	Audio Data Transmitt Unit 1 Data Output
47	AX2	O	Audio Data Transmitt Unit 2 Data Output
48	AX3	O	Audio Data Transmitt Unit 3 Data Output
49	VSS	S	Ground
50	VDD	S	Power Supply
51	HX/SDA	I/O/Z	Host Interface Data Output/I2C Bus Data
52	/EMPTY	O/Z	CMEM Update Buffer and HR Resistor Empty Flag Output

PIN No.	NAME	I/O	FUNCTION
53	AXLR2	I	Audio Data Transmitt Unit 2/3 Left and Right Channel Frame Frequency Signal
54	AR1	I	Audio Data Receive Unit 1 Data Input
55	AR2	I	Audio Data Receive Unit 2 Data Input
56	HRBCK/SA0	I	Host Interface Receive Clock / I2C Bus Address 0
57	HR/SA1	I	Host Interface Data Input/ I2C Bus Address 1
58	HRS/SA2	I	Host Interface Receive Data Frame Frequency Signal/ I2C Bus Address 2
59	VSS	S	Ground
60	VDD	S	Power Supply
61	HXBCK/SCL	I	Host Interface Transmitt Clock/ I2C Bus Clock
62	HXS/SA3	I	Host Interface Transmitt Data Frame Frequency Signal/ I2C Bus Address 3
63	/CS/SA4	I	Host Interface Chip Select/ I2C Bus Address 4
64	HBCKS/SA5	I	HRBCK/HXBCK Active Edge Select/ I2C Bus Address 5
65	I2CSEL	I	Host Interface Mode Select
66	VSS	S	Ground
67	VDD	S	Power Supply
68	AXBC1	I	Audio Data Transmitt Unit 1 bit Clock
69	AXBC2	I	Audio Data Transmitt Unit 2/3 bit Click
70	AXLR1	I	Audio Data Transmitt Unit 1 Left and Right Channel Frame Frequency Signal
71	DIVS	O	Machine Clock Output then 8 min.
72	/LAV	O	Ruch ALU Overflow Frag Output
73	/LMV	O	Ruch MAC Overflow Frag Output
74	/DRDY	O/Z	Host Interface Transmitt Data Ready Frag Output
75	EMU0	I/O/Z	Emurator Interrupt 0
76	EMU1	I/O/Z	Emurator Interrupt 1
77	TDO	O/Z	TAP(Test Access Port) Data Output
78	DIV512	O	Machine Clock then512 min.
79	ARLR1	I	Audio Data Receive Unit 1 Left and Right Channel Frame Frequency Signal
80	ARLR2	I	Audio Data Receive Unit 2 Left and Right Channel Frame Frequency Signal
81	HDIR/SA6	I	Host Interface Data Format Select/ I2C Bus Address 6
82	SEL5V3V	I	Input Level Control
83	/MUTE	I	Mute Control
84	/TRST	I	TAP(Test Access Port) Reset
85	/RS	I	Hardware Reset
86	VSS	S	Ground
87	VDD	S	Power Supply
88	/IOE	O	External I/O Enable
89	/RAS/SRCS	O	External DRAM Low Address Strove/External SRAM Chip Select
90	/CAS/SROE	O	External DRAM Culumn Address Strove/External SRAM Output Enable
91	/ROME	O	External ROM Enable
92	/WE	O	External Memory and I/O Wright Enable
93	EA0	O	
94	EA1	O	External Memory and I/O Address Bus
95	EA2	O	
96	EA3	O	
97	VSS	S	Ground
98	VDD	S	Power Supply
99	ED0	I/O	External Memory and I/O Data Bus
100	ED1	I/O	

● UPD78082GB-XXX (XY296A00) MCU

DSP-ZFX: IC303

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	P12/ANI2	I/O	8 bits input/output port./A/D converter analog input.	23	NC	-	Not connect.
2	P13/ANI3	I/O	8 bits input/output port./A/D converter analog input.	24	P32	I/O	Port 3. 8 bits input/output port.
3	P14/ANI4	I/O	8 bits input/output port./A/D converter analog input.	25	P33	I/O	Port 3. 8 bits input/output port.
4	P15/ANI5	I/O	8 bits input/output port./A/D converter analog input.	26	P34	I/O	Port 3. 8 bits input/output port.
5	P16/ANI6	I/O	8 bits input/output port./A/D converter analog input.	27	P35/PCL	I/O	Port 3. 8 bits input/output port./Clock output.
6	P17/ANI7	I/O	8 bits input/output port./A/D converter analog input.	28	P36/BUZ	I/O	Port 3. 8 bits input/output port./Buzzer output.
7	P72/SCK2/ASCK	I/O	Port 7. 3 bits input/output port./Serial clock input/output of serial interface./Serial clock input for asynchronus serial interface.	29	P37	I/O	Port 3. 8 bits input/output port.
				30	P00	I	Input only
				31	P01/INTP1	I/O	4 bits input/output port./Effective edge (Rising edge, falling edge, both rising and falling edges) specifiable external interrupt input.
8	P71/SO2/TXD	I/O	Port 7. 3 bits input/output port./Serial data output for serial interface./Serial data output for asynchronus serial interface.				
9	P70/SI2/RXD	I/O	Port 7. 3 bits input/output port./Serial data input of serial interface./Serial data input for asynchronus serial interface	32	P02/INTP2	I/O	4 bits input/output port./Effective edge (Rising edge, falling edge, both rising and falling edges) specifiable external interrupt input.
10	P101/T16/T06	I/O	Port 10. 2 bits input/output port./External count clock input to 8 bits timer(TM6)./8 bits timer output.	33	P03/INTP3	I/O	4 bits input/output port./Effective edge (Rising edge, falling edge, both rising and falling edges) specifiable external interrupt input.
11	P100/T15/T05	I/O	Port 10. 2 bits input/output port./External count clock input to 8 bits timer(TM5)./8 bits timer output.				
12	P50	I/O	Port 5. 8 bits input/output port.	34	NC	-	Not connect
13	P51	I/O	Port 5. 8 bits input/output port.	35	RESET	I	System reset input
14	P52	I/O	Port 5. 8 bits input/output port.	36	IC(VPP)	-	Internal connect
15	P53	I/O	Port 5. 8 bits input/output port.	37	X2	-	Main system clock oscillator X'tal
16	P54	I/O	Port 5. 8 bits input/output port.	38	X1	I	Main system clock oscillator X'tal
17	VSS	I/O	Port 5. 8 bits input/output port.	39	VDD	-	Power Supply
18	P55	I/O	Port 5. 8 bits input/output port.	40	AVDD	-	A/D Converter Analog Power Supply
19	P56	I/O	Port 5. 8 bits input/output port.	41	AVREF	I	A/D Converter Power Supply Input
20	P57	I/O	Port 5. 8 bits input/output port.	42	AVSS	-	A/D Converter ground
21	P30	I/O	Port 3. 8 bits input/output port.	43	P10/ANI0	I/O	8 bits input/output port./A/D converter analog input.
22	P31	I/O	Port 3. 8 bits input/output port.	44	P11/ANI1	I/O	8 bits input/output port./A/D converter analog input.

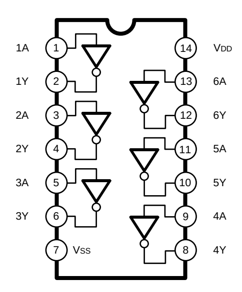
● PCM3001E/2K (X0053A00) ADA

DSP-ZFX: IC305

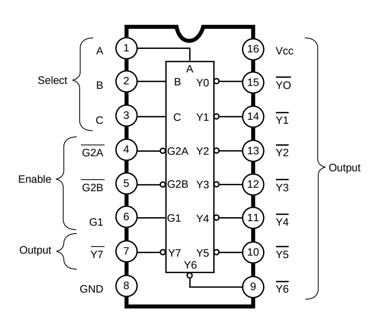
PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	VINL	I	ADC Analog Input, Lch	15	VOUTL	O	DAC Analog Output, Lch
2	Vcc1		ADC Analog Power Supply	16	LRCIN	I	Sampling Clock Input (fs)
3	AGND1		ADC Analog GND	17	BCKIN	I	Bit Clock Input
4	VREFL		ADC Reference decouple, Lch	18	DIN	I	Audio Data Input
5	VREFR		ADC Reference Decouple, Rch	19	DOUT	O	Audio Data Output
6	VINR	I	ADC Analog Input, Rch	20	XTI	I	Crystal Oscillator Input, External System Clock Input
7	CINPR		ADC Anti-areasing Filter Capacitor (+), Rch	21	XTO	O	Crystal Oscillator Output
8	CINNR		ADC Anti-areasing Filter Capacitor (-), Rch	22	CLKIO	I/O	Crystal Oscillator Buffer Output, External System Clock Input
9	CINNL		ADC Anti-areasing Filter Capacitior (-), Lch	23	VDD		Digital Power Supply
10	CINPL		ADC Anti-areasing Filter Capacitor (+), Rch	24	DGND		Digital GND
11	VCOM		DAC Center Voltage Decouple	25	FMT2	I	Audio Data Format 2 (Pull up to 70k ohm typical)
12	VOUTR	O	DAC Analog Output, Rch	26	FMT1	I	Audio Data Format 1 (Pull up to 70k ohm typical)
13	AGND2		DAC Analog GND	27	FMT0	I	Audio Data Format 0 (Pull up to 70k ohm typical)
14	Vcc2		DAC Analog Power Supply	28	RSTB	I	Reset Input, Active "L" (Pull up to 70k ohm typical)

IC BLOCK DIAGRAM

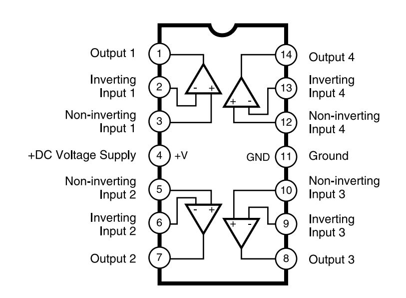
- **74HCU04DT** (XZ110A00)
  INVERTER
  DSP-ZFX: IC302



- **TC74HC138AFEL** (XW762A00)
  3 to 8 Demultiplexer
  MIX66: IC902

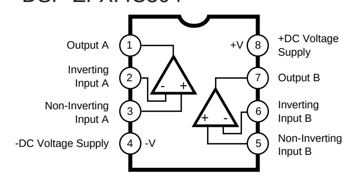


- **NJM2060M(TE2)OP** (XM560A00)
  Quad Operational Amplifier
  MIX66: IC803, IC804, IC805, IC806

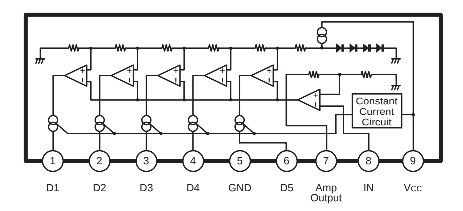


- **TL072CPSR**(XV423A00)
- **NJM2068MD-T1**(XJ553A00)
- **NJM4558MT-1**(IG103520)

  Dual Operational Amplifier
  MIX66: IC101, IC102, IC301, IC302
  IC501, IC601, IC603, IC703
  IC704, IC705, IC706, IC707
  IC807, IC901, IC903
  DSP-ZFX: IC304



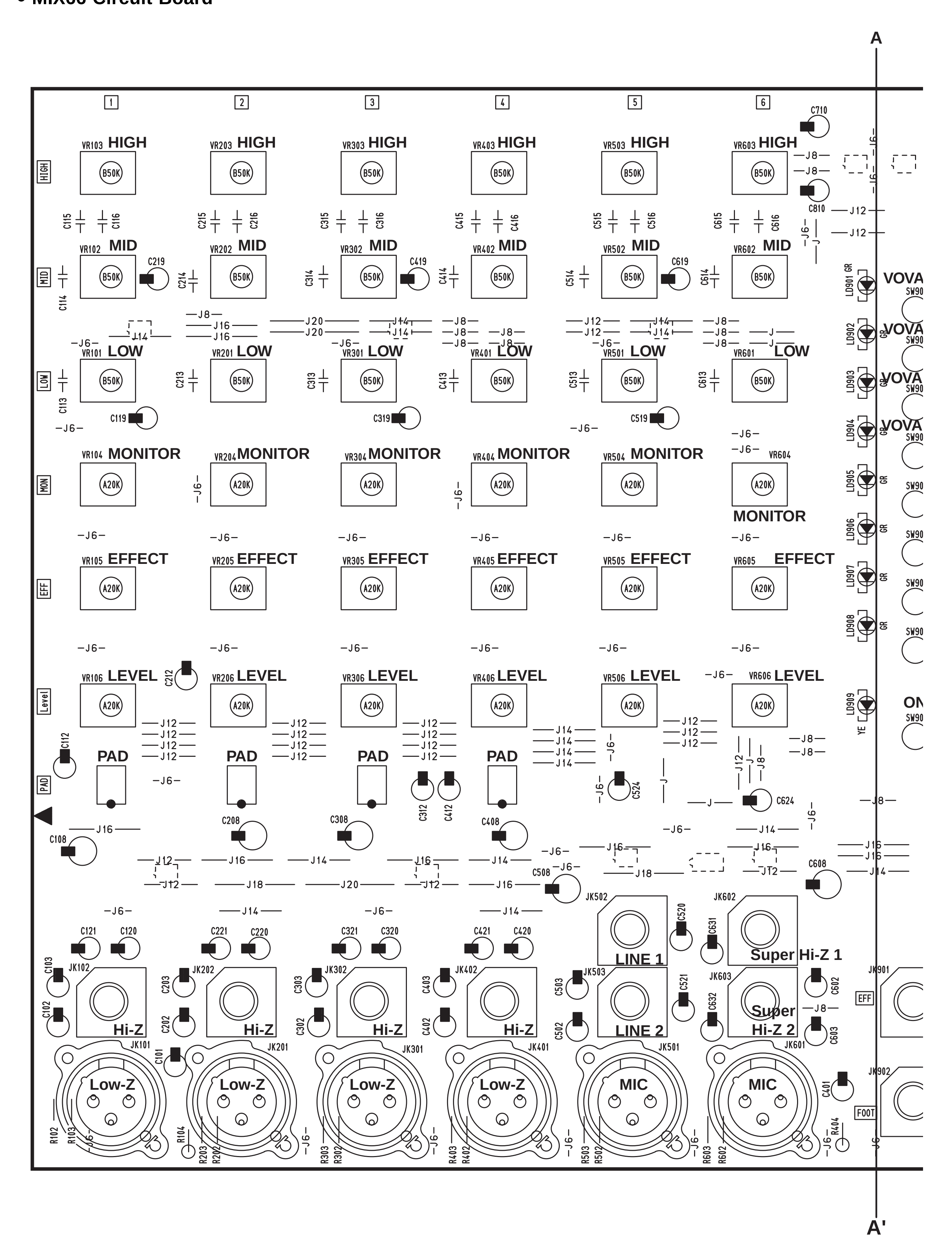
- **LB1403N** (XZ348A00)
  LED Driver
  MIX66: IC702, IC802

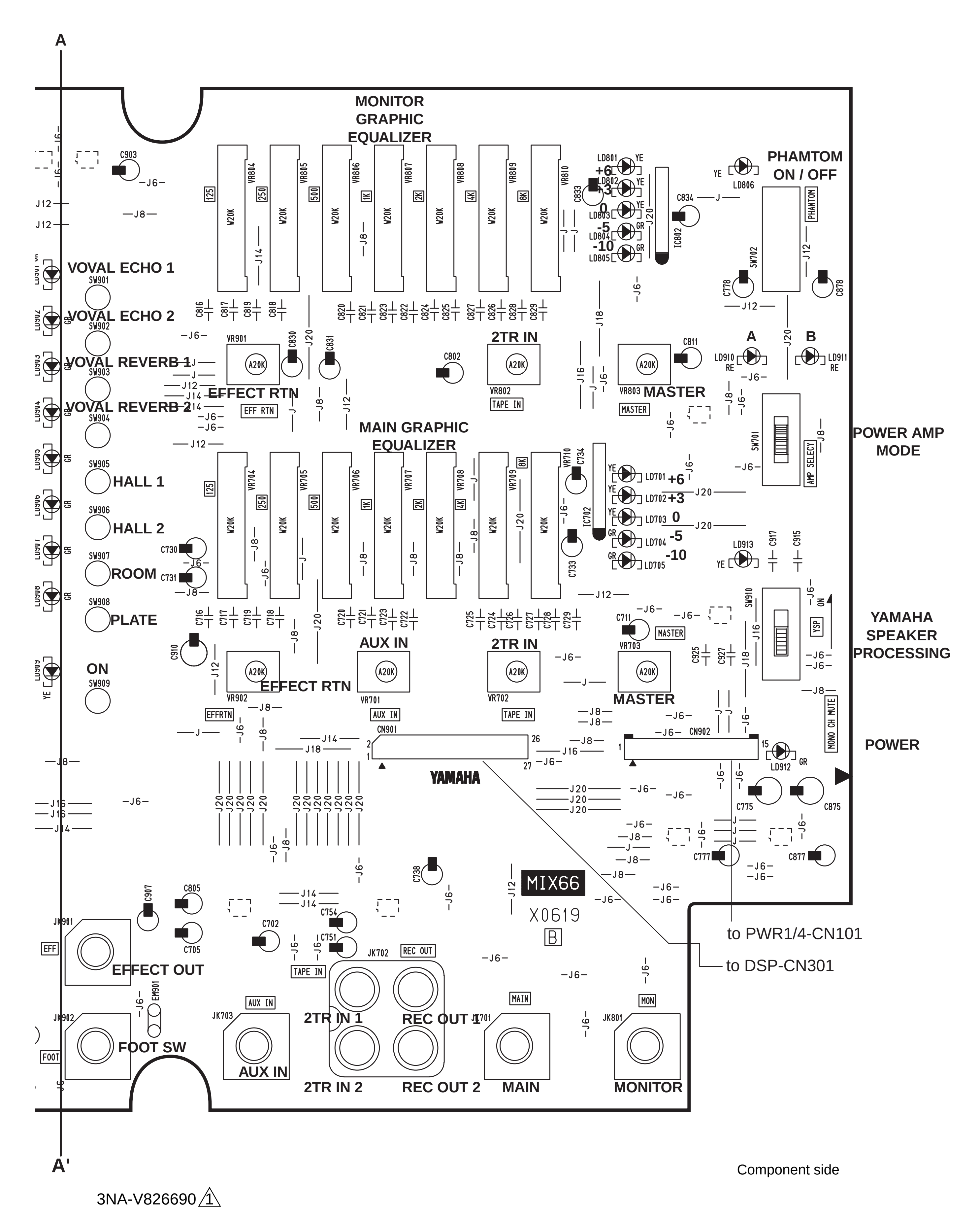


CIRCUIT BOARDS

CONTENTS

• MIX66 Circuit Board

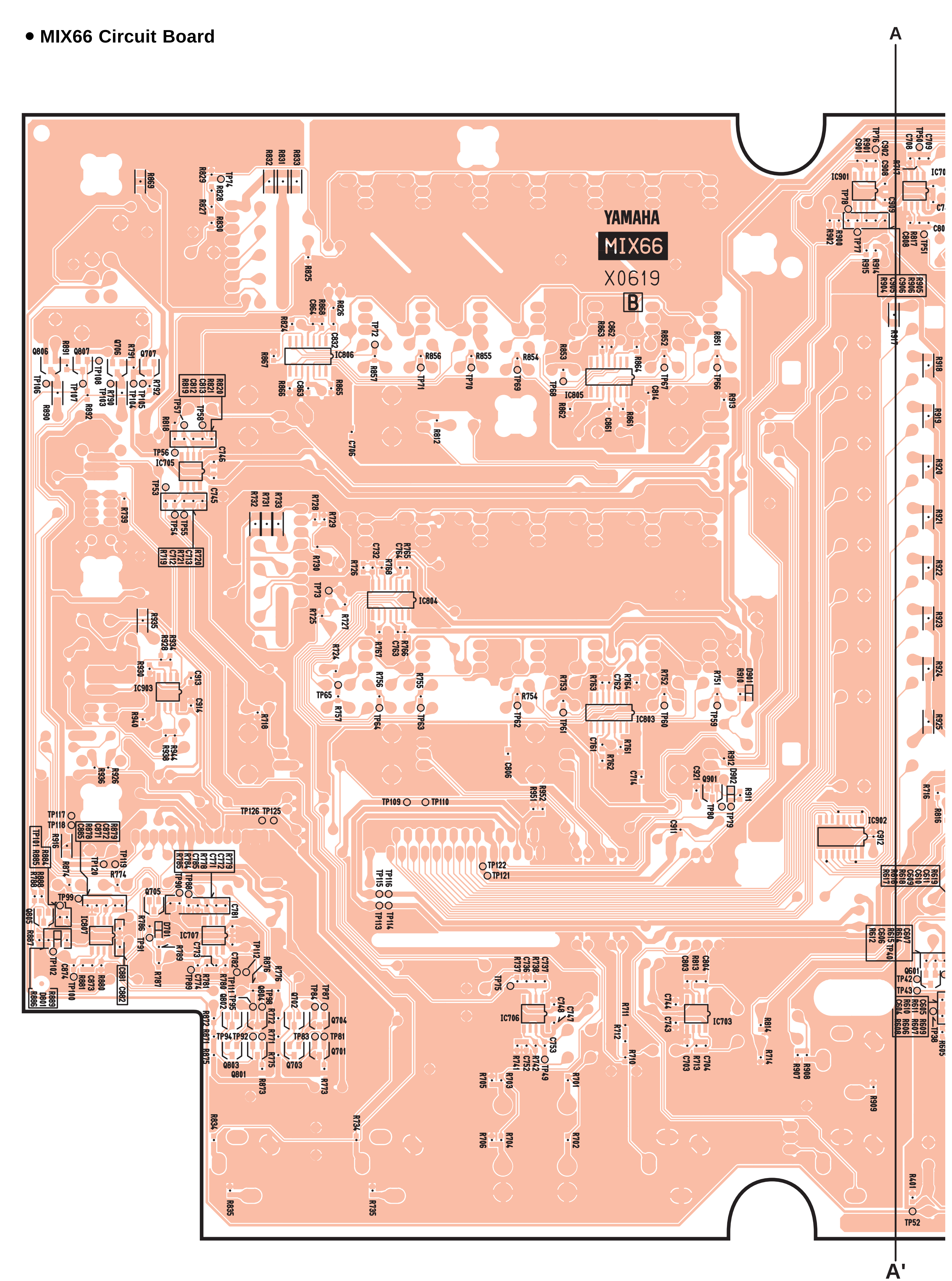




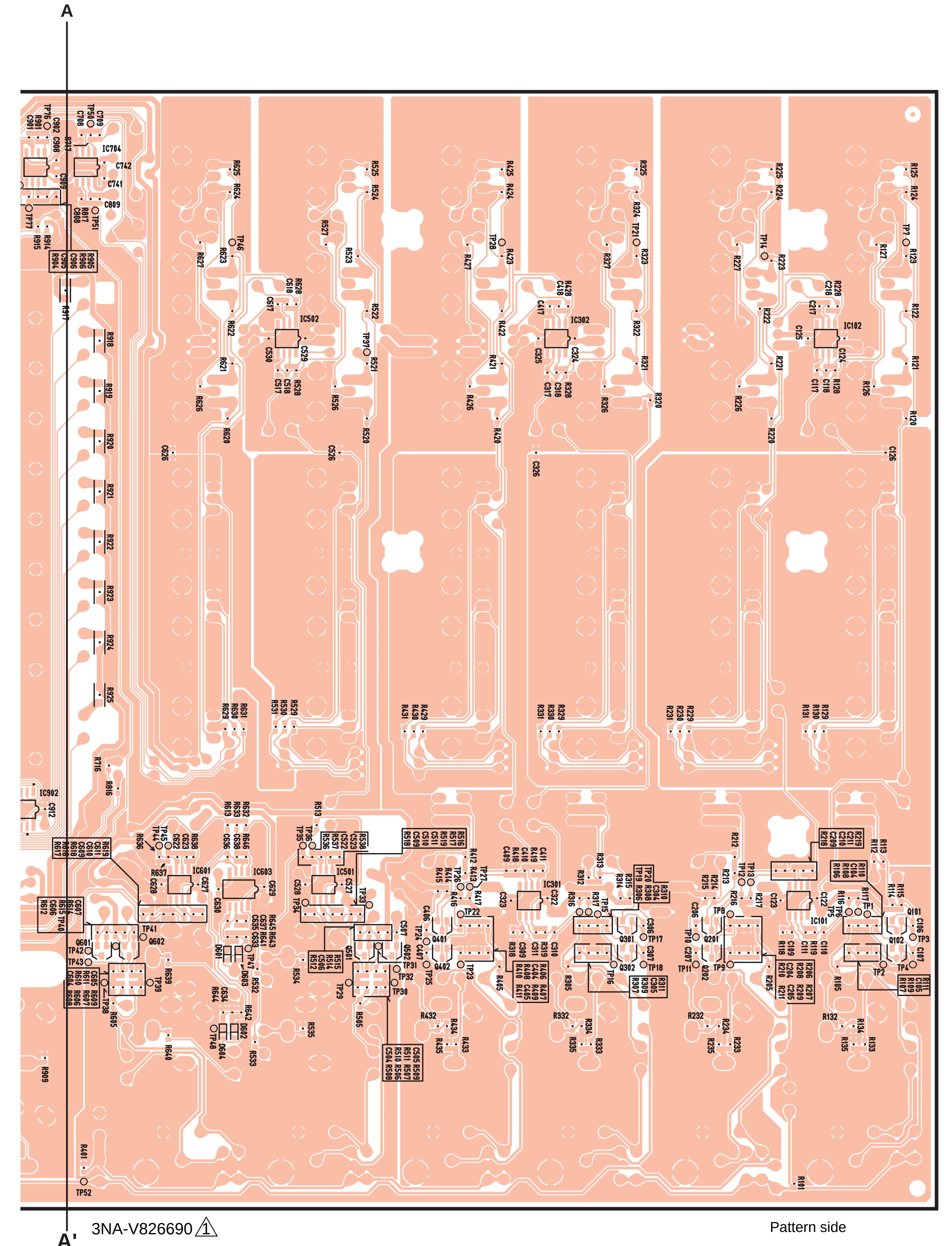
Component side

3NA-V826690 ⚠1

• MIX66 Circuit Board



A

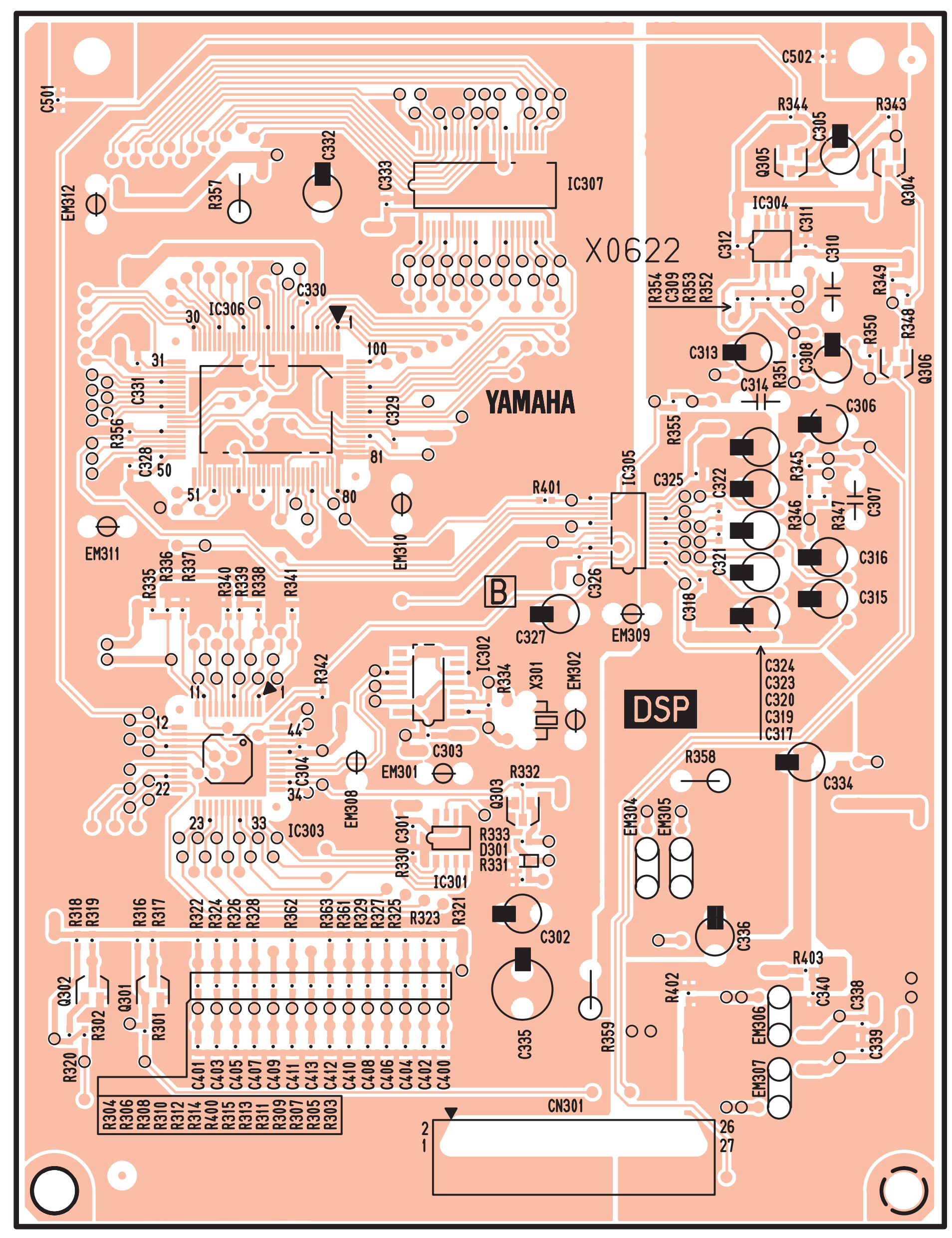


A'

3NA-V826690 1

Pattern side

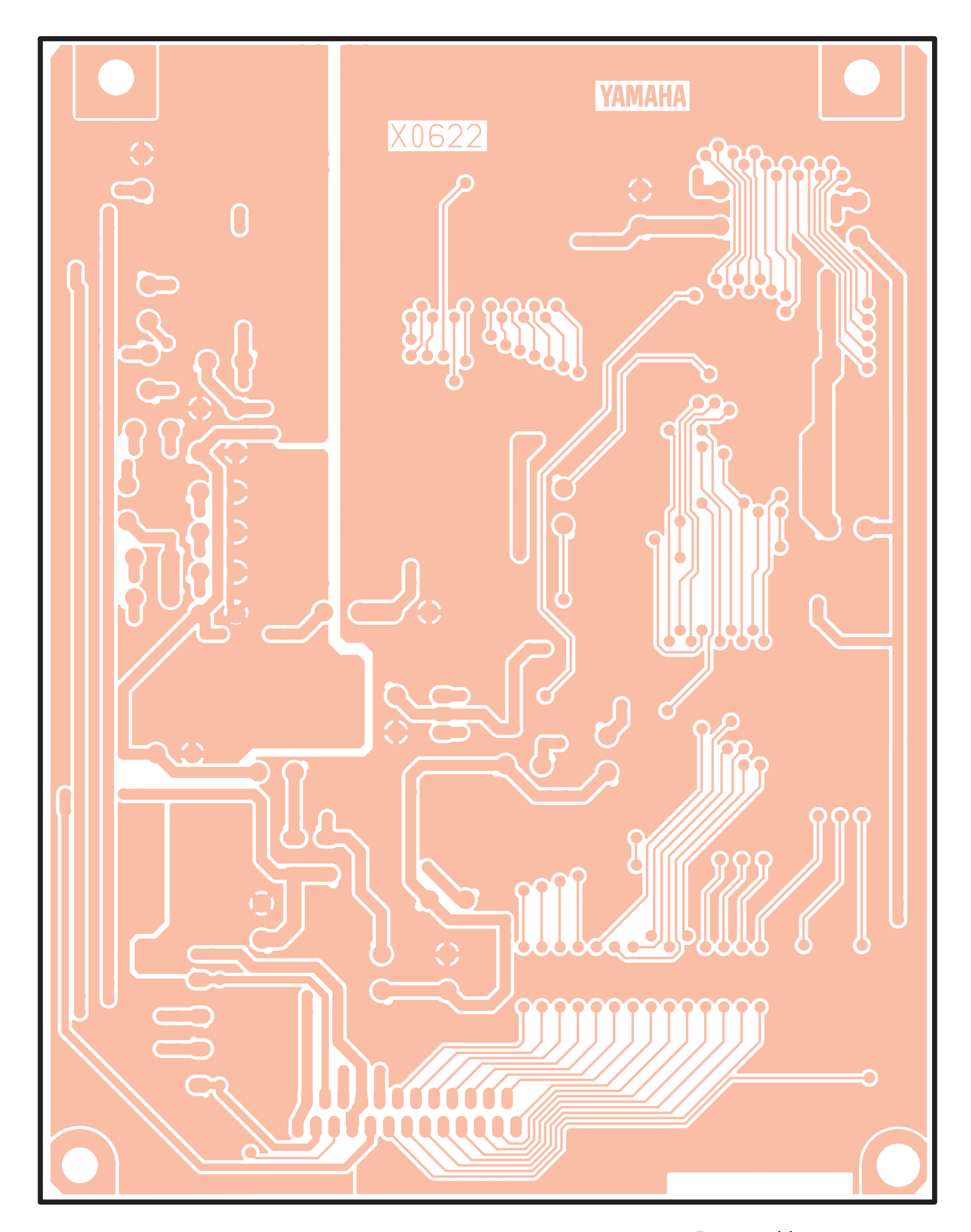
• **DSP Circuit Board**



to MIX66-CN901

Component side

3NA-V826710 ⚠1



Pattern side

3NA-V826710 ⚠1

• PWR 1/4 Circuit Board

A

to PWR2/4-W101RE2

68,88:A1492
66:A1386

68,88:A1492
66:A1386

68,88:C3856
66:C3519

68,88:C3856
66:C3519

E

D8LD40

68,88:A1492
66:A1386

68,88:A1492
66:A1386

PWR

X0623 1/4

to MIX66-CN902

to PWR1/4-W103OR1

68,88:A1492
66:A1386

68,88:A1492
66:A1386

68,88:C3856
66:C3519

68,88:C3856
66:C3519

H

D8LD40

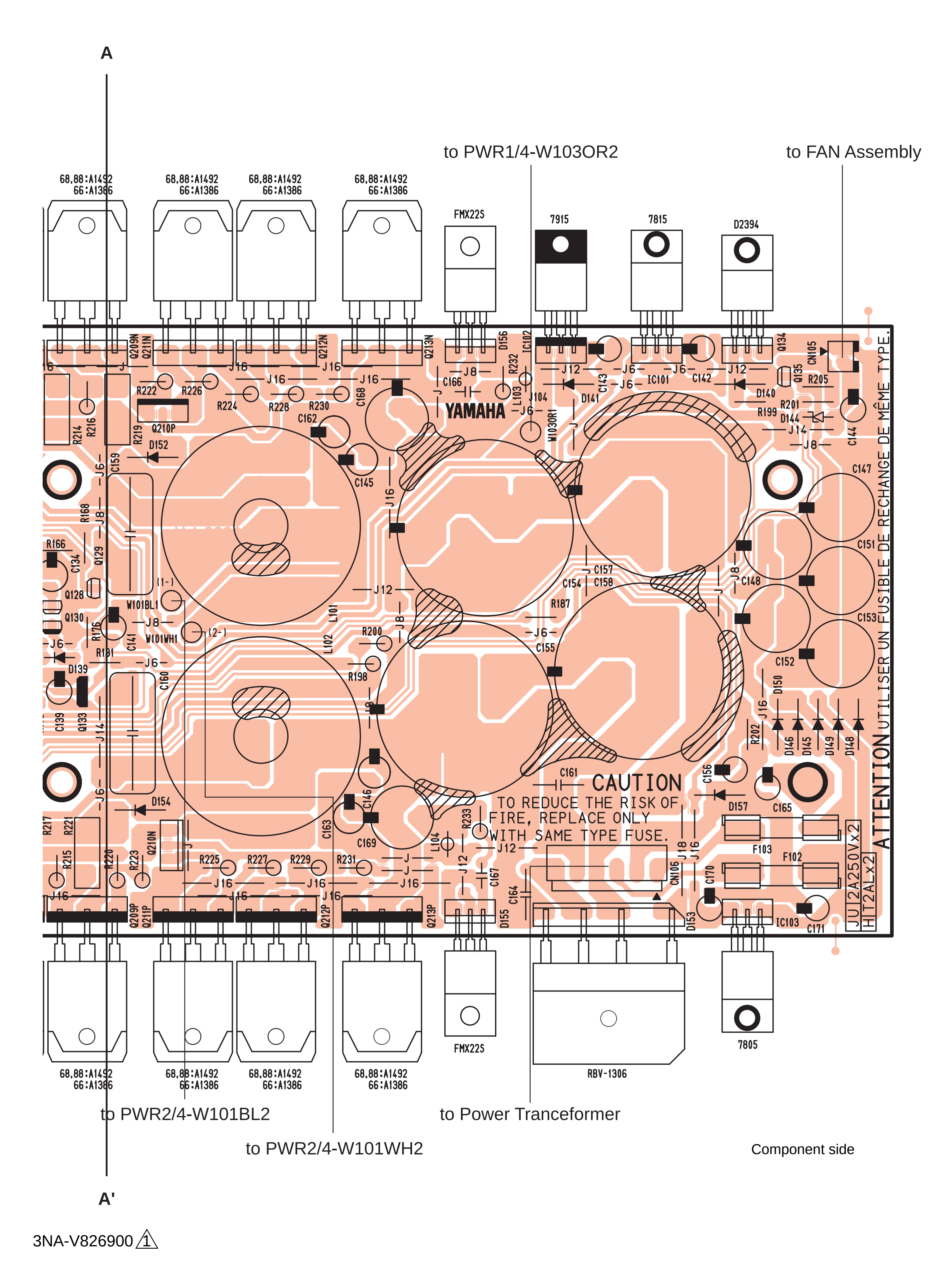
68,88:A1492
66:A1386

68,88:A1492
66:A1386

to PWR2/4-W101BE2

to PWR

A'



Component side

3NA-V826900 ⚠1

• PWR 2/4 Circuit Board

SPEAKERS

A
1 2

BRIDGE

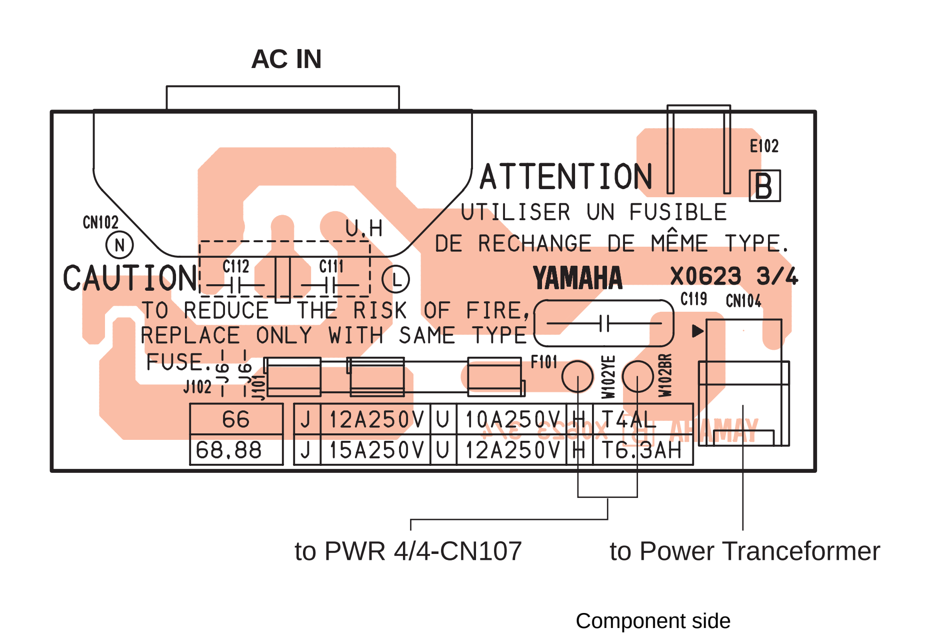
B
1 2

E101 C126 J6 J105 C138 J20
JK101 C123 JK102 JK103 J6 J106 JK104 C130 JK105
R156 C124 J20 C125 J20 C132 R167
YAMAHA B R153 J108 J6 J6 J107 R158 X0623 2/4
W101RE2 W101BL2 W101WH2 W101BE2
L105 (1+) (1-) (2-) (2+) L106

to PWR 1/4-W101RE1
to PWR 1/4-W101BE1
to PWR 1/4-W101BL1
to PWR 1/4-W101WH1

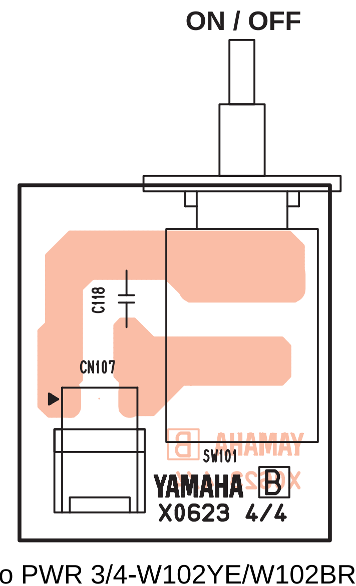
Component side

• PWR 3/4 Circuit Board



Component side

• PWR 4/4 Circuit Board



Component side

PWR 2/4: 3NA-V826900 ⚠1
PWR 3/4: 3NA-V826900 ⚠1
PWR 4/4: 3NA-V826900 ⚠1

INSPECTIONS

0. PREPARATION

(1) Mesuring instruments
- Oscillator (Ballance output type, Output impedance 150Ω)
- Oscilloscope (Input impedance 100kΩ)
- Level meter (Input impedance 100kΩ)
- Distortion Meter

(2) Notes for mesuring
- Noise level must be mesured by using DIN AUDIO FILTER.
- 0dB is equal to 0.775V.

1. Power Indicator Check

Confirm that the power indicator LED lights up while the power is ON.

2. Mixer Check

2.1 Preparation

- Except otherwise indicated, input signal should be 1kHz sine curve and output impedance of signal source should be 150Ω.
- Connect the load of 10kΩ to MAIN OUT, MONITOR OUT, EFFECT OUT and REC OUT terminal.
- Set each control as follows.

CH INPUT 1-4

EQ (HIGH, MID, LOW) level control:	CENTER
MONITOR level control:	MAX
EFFECT level control:	MAX
LEVEL control:	MAX
PAD switch:	OFF

CH INPUT 5-6

EQ (HIGH, MID, LOW) level control:	CENTER
MONITOR level control:	MAX
EFFECT level control:	MAX
LEVEL control:	MAX

EFFECT

DIGITAL EFFECT ON switch:	OFF

MAIN

GRAPHIC EQUALIZER (7 band) fader:	CENTER
EFFECT RTN level control:	MAX
AUX IN level control:	MAX
2TR IN level control:	MAX
MASTER (MAIN) level control:	MAX

MONITOR

GRAPHIC EQUALIZER (7 band) fader:	CENTER
EFFECT RTN level control:	MAX
2TR IN:	MAX
MASTER (MAIN) level control:	MAX

PHANTOM switch:	OFF
YAMAHA SPEAKER PROCESSING switch:	OFF
POWER AMP switch:	MAIN-MONITOR

2.2 Gain Check

On condition of 2.1, confirm that the output level of each terminal meets the table 2.2-1.

Table 2.2-1 [unit: dBs]

INPUT	INPUT LEVEL	MAIN OUT(L,R)	MONITOR OUT	EFFECT OUT	REC OUT
Low-Z	-62	+4±2	+4±2	+4±2	-13.8±2
MIC	-32 (PAD ON)				
Hi-Z	-52	+4±2	-	-	-
LINE	-22	+4±2	-	-	-
Super Hi-Z	-42	+4±2	-	-	-
AUX	-22	+4±2	-	-	-
2TR	-22	+4±2	-	-	-

2.3 Frequency Characteristic Check

At each terminal of the Table 2.2-1, confirm that the output level for 20Hz, 20kHz signal are within +1, -3dB from the level for 1kHz signal.

2.4 EQ Response Characteristic Check

On condition of 2.1, set the LOW, MID, HIGH controls according to the table 2.4-1, and mesure the output level of MAIN OUT and MONITOR OUT.

Then confirm that output level variations from center click position meet the table 2.4-1.

When output level does not meet the table, change the input frequency until the output level meets the table.

If the frequency variation is within ±20% of the rated value, the rusult can be regarded as OK.

Table 2.4-1 [unit: dB]

EQ	VR Setting	INPUT FREQUENCY	RANGE OF VARIATION
HIGH	MAX	10kHz	+12±2
	MIN		-12±2
MID	MAX	2.5kHz	+14±2
	MIN		-14±2
LOW	MAX	100Hz	+12±2
	MIN		-12±2

2.5 GEQ Response Characteristic Check

On condition of 2.1, set the GEQ faders to MIN or MAX, and mesure the output levels of MAIN OUT and MONITOR OUT.

Then confirm that output level variations from center click position meet the table 2.5-1.

When the output level does not meet the table, change the input frequency until the output level meets the table.

If the frequency variation is within ±20% from the rated value, the result can be regarded as OK.

Table 2.5-1 [unit: dB]

		125	250	500	1k	2k	4k	8k
INPUT FREQUENCY		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Variations	(for fader MAX)	+12±2						
	(for fader MIN)	-12±2						

2.6 LED Meter Check

When the output level of MAIN OUT and MONITOR OUT meets the Table 2.6-1, confirm that the corresponding LED meter starts to light up.

Table 2.6-1 [unit: dBs]

LED	+6	+3	0	-5	-10
OUTPUT LEVEL	+10±2	+7±2	+4±2	-1±2	-6±2.5

2.7 Distortion Rate Check

On condition of 2.1, set the INPUT and MASTER volume for each terminal to nominal position.
Then, confirm that the distortion rate is within 0.3% when the output level is +14dBs. (except REC OUT)

2.8 Maximum Output Level Check

At MAIN OUT, MONITOR OUT, EFFECT OUT terminals on condition of 2.7, confirm that the output level of +20dBs can be gained with the distortion rate less than 1%.

2.9 EIN Check

Note: This mesurement should be performed by using DIN AUDIO FILTER.

On condition of 2.1, set the LEVEL control for mesuring channel to maximum and set the LEVEL control for other channels to minimum.
Connect the 150Ω load between the Low-Z and the MIC of input channel, and confirm that the noise level of MAIN OUT is less than -58dB.
However, less than -56dB as for CH6.
If noise level is more than the rated value, find the noise level converted from the input level for each channel.
Then confirm that the noise level is less than -124dB as for CH1-5, and less than -122dB as for CH6.

2.10 Remaining Noise Check

On condition of 2.1, set the LEVEL control of all input channels to minimum.
Set the MASTER control of MAIN and MONITOR to maximum or minimum, and mesure the noise level of MAIN OUT, MONITOR OUT, and EFFECT OUT.
Then, confirm that the noise levels are less than the values shown in the table 2.10-1.

Table 2.10-1 [unit: dB]

MASTER VR	MAIN OUTPUT(L,R)	MONITOR OUTPUT	EFFECT OUT
MAX	-71	-71	-73
MIN	-88	-88	-

2.11 PHANTOM Check

Connect the 2.7kΩ load between the pin1 and pin2 of Low-Z or MIC, and short-circuit the pin2 and pin3 of them.
Then, confirm that the load voltage is 10±1.5V when the PHANTOM switch is ON.

2.12 DIGITAL EFFECT Check

- Turn on the power with VOCAL ECHO1 and ON switch pressed and held, and confirm that the ON LED blinks.
- Set EFFECT level control, LEVEL control, MASTER of MONITOR, and EFFECT of MONITOR to maximum.
  Apply -48dBs / 1kHz signal into CH6 Super Hi-Z and mesure the output level of MONITOR OUT.
- Select the PROGRAM switch according to the Table 2.12-1 and confirm that the output level meets the table.

Table 2.12-1

EFFECT	OPERATION	OUTPUT level (MONITOR OUTPUT)
VOCAL ECHO 1	Press the ON switch	No output [DIN AUDIO] -48dBs
VOCAL ECHO 2	Set the LEVEL to minimum	No output [DIN AUDIO] -48dBs
VOCAL REVERB 1	-	Recognizable
VOCAL REVERB 2	-	No output [DIN AUDIO] -48dBs
HALL 1	Switch the FOOT SW	Less than -30 dBs [DIN AUDIO] or full output
HALL 2	-	No output [DIN AUDIO] -48dBs
ROOM	-	Decays 4.2±1 dBs from the full output
PLATE	-	Full output; 10±3 dBs

- When each PROGRAM switch is pressed, confirm that the corresponding LED lights up.
- Apply the music source (vocal etc), and confirm the effect aurally.

2.13 Stability Check

Note: This mesurement should be performed with a load resistance connected to power amplifier output. (See 3.1.1)

- At each input terminal, connect 10pF~0.1µF capacitor in parallel to the load resistance, and confirm that the system works normally without oscillation etc.
- Set all VR and EQ faders to maximum, and confirm that the system works normally. (Especially, does not oscillate when the EQ HIGH is set to maximum)

3. Power Amplifier Check

3.1 For the case that the POWER AMP switch is 'MAIN-MONITOR' or 'MAIN-MAIN'

3.1.1 Preparation

- INPUT terminal: CH 5 LINE 1
- POWER AMP switch: MAIN-MAIN
- OUTPUT terminal: SPEAKERS A1, SPEAKERS B1
- Load Resistance: 4Ω (more than 300W)
  Except otherwise indicated, the load resistance should be connected only for the power amplifier check.
- Set the LEVEL control of CH1-4, 6 to minimum.
- Except the above, same as the setting of 2.1.

3.1.2 Power ON Mute Check

Turn on the power and confirm that the mute system is released and the relay is switched on after 2.5±1 seconds.

3.1.3 Output Terminal D.C. Voltage Check

Ground input terminal and confirm that the D.C. voltage of output terminal is 0±100mV.

3.1.4 Gain Check

- Apply -26dBs signal into the input terminal and confirm that the output level of 20.0±2.0dBs can be gained.
- Set the POWER AMP switch to ’MAIN-MON’ and confirm that the same output level can be gained at SPEAKERSA2, B2 output.

3.1.5 Frequency Response Check

- YAMAHA SPEAKERS PROCESSING Switch OFF
  Apply -26dBs signal info input terminal, and confirm that the output level for 20Hz, 20kHz signal are within +1, -3dB from the level for 1kHz signal.
- YAMAHA SPEAKERS PROCESSING Switch ON
  Apply 70Hz / -26dB signal into input terminal, and confirm that the output level is within 6.5±2dB from the level for 1kHz input with YAMAHA SPEAKERS PROCESSING switch OFF.
  Besides, confirm that the LED lights up when YAMAHA SPEAKERS PROCESSING switch is ON and that LED goes out when the switch is OFF.

3.1.6 Harmonic Distortion Rate Check

Note: This mesurement should be finished in 30 seconds.

- Apply 1kHz signal into input terminal, and confirm that output level of 300W/4Ω (33.0dBs) can be gained with harmonic distortion rate less than 0.5%.
- Apply 20Hz, 1kHz and 20kHz signal into input terminal, and confirm that harmonic distortion rate is less than 0.5% as for 20Hz and 1kMz, less than 0.7% as for 20kHz when output level of 150W/4Ω (30.0dBs) can be gained.

3.1.7 Remaining Noise Check

Set the MASTER (MAIN) and the MASTER (MONITOR) to minimum, and confirm that the noise level of output terminal is less than -65dB.

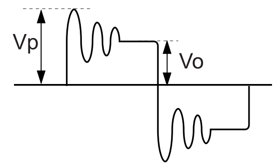
Note: Take care not to be affected by inductive noise.
This mesurement should be performed by using DIN AUDIO FILTER.

3.1.8 Stability Check

(1) Connect 10pF~0.47μF capacitor in parallel to the 4Ω load resistance and apply rectangule signal of 10kHz/-26dBs.
Then, confirm that overshoot and ringing are as follows.
Overshoot: Vp/Vo ≦ 1.8
Ringing: within 5 waves

(2) Connect 10μH~0.47H inductor in series to the 4Ω load resistance and apply rectangule signal of 10kHz/-26dBs.
Then, confirm that overshoot and ringing meet the same condition as (1).

(3) Remove the 4Ω load resistance and connect only 10pF~0.47μF capacitor as load, and apply rectangule signal of 10kHz/-26dBs.
Then confirm that the system does not oscillate.
Besides, confirm that overshoot and ringing are as follows.
Overshoot: Vp/Vo ≦ 2.5
Ringing: within 7 waves



3.1.9 Protection Circuit Check

(1) Apply 10Hz signal until output level is saturated, and confirm that the protection circuit works and the relay does not open.
(2) Apply 1Hz, Vp-p = 6V(8.7dBs) signal, and confirm that the protection circuit starts to work in 2 seconds to cut off the signal.
(3) Stop applying the input signal, and confirm that the system automatically resumes in 5 seconds.

3.1.10 PC LIMITER Circuit and LIMITER Circuit Check

(1) Connect 1Ω (±5%, 100W) load and apply -20dBs signal into input terminal.
(2) Confirm that the protection circuit starts to work and indicator LED lights up.
(3) Stop applying the input signal, and confirm that the system automatically resumes in 5 seconds.

3.1.11 LIMITER Indicator Check

Apply 1kHz/-10.8dBs signal, and confirm that LIMITER indicator lights up.

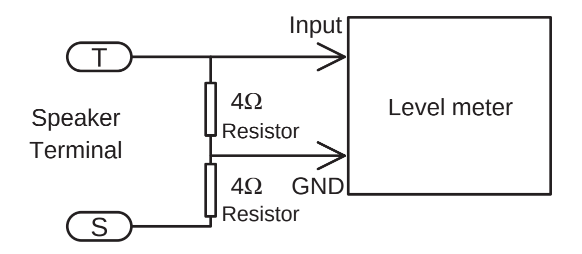
3.1.12 Efficiency Check

Apply 1kHz/-24dB signal into input terminal, and confirm that the primary power is 180±50W.
If the primary power does not meet the rated value, adjust the input level until the output level of SPEAKERS becomes 12.2V(24.0dBs).

3.2 For the case that the POWER AMP switch is 'MAIN BRIDGE'

3.2.1 Preparation

- POWER AMP switch: MAIN BRIDGE
- INPUT terminal: CH 5 LINE 1
- MASTER (MAIN): MAX
- OUTPUT terminal: BRIDGE
- Load Resistance: 8Ω(more than 600W)
  Except otherwise indicated, the load resistance of SPEAKER should be connected only for the amplifier check.
- LEVEL control of CH1-4, 6: MIN
- Except the above, same as the setting of 2.1



3.2.2 Gain Check

Apply -26.0dB signal into input terminal, and confirm that the output level of 22.0±2 dBs can be gained.

3.2.3 Frequency Response Check

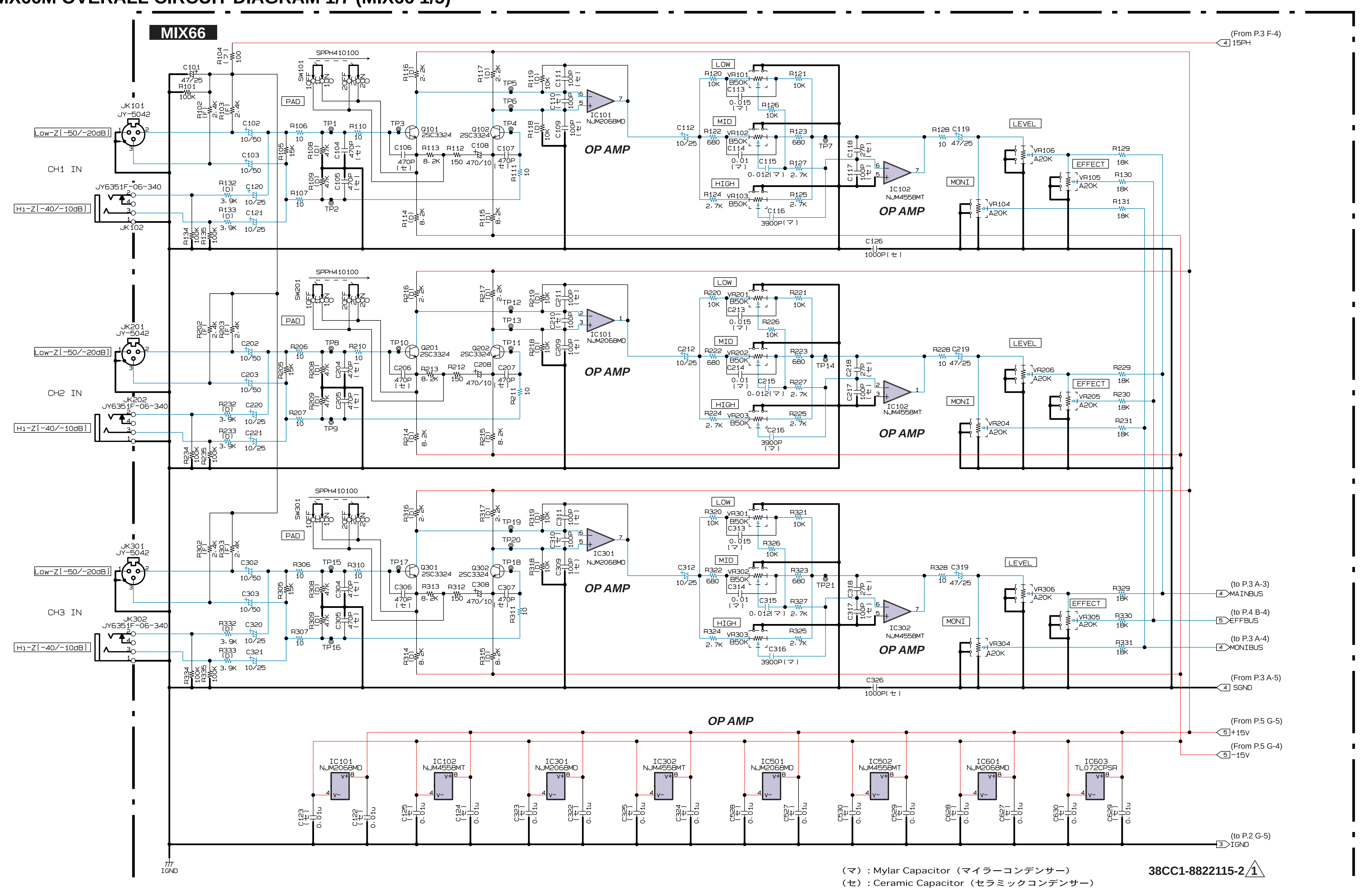
Apply -26.0dBs signal into input terminal, and confirm that the output level for 20Hz, 20kHz signal are within +1, -3dB from the level for 1kHz signal.

4. Miscellaneous

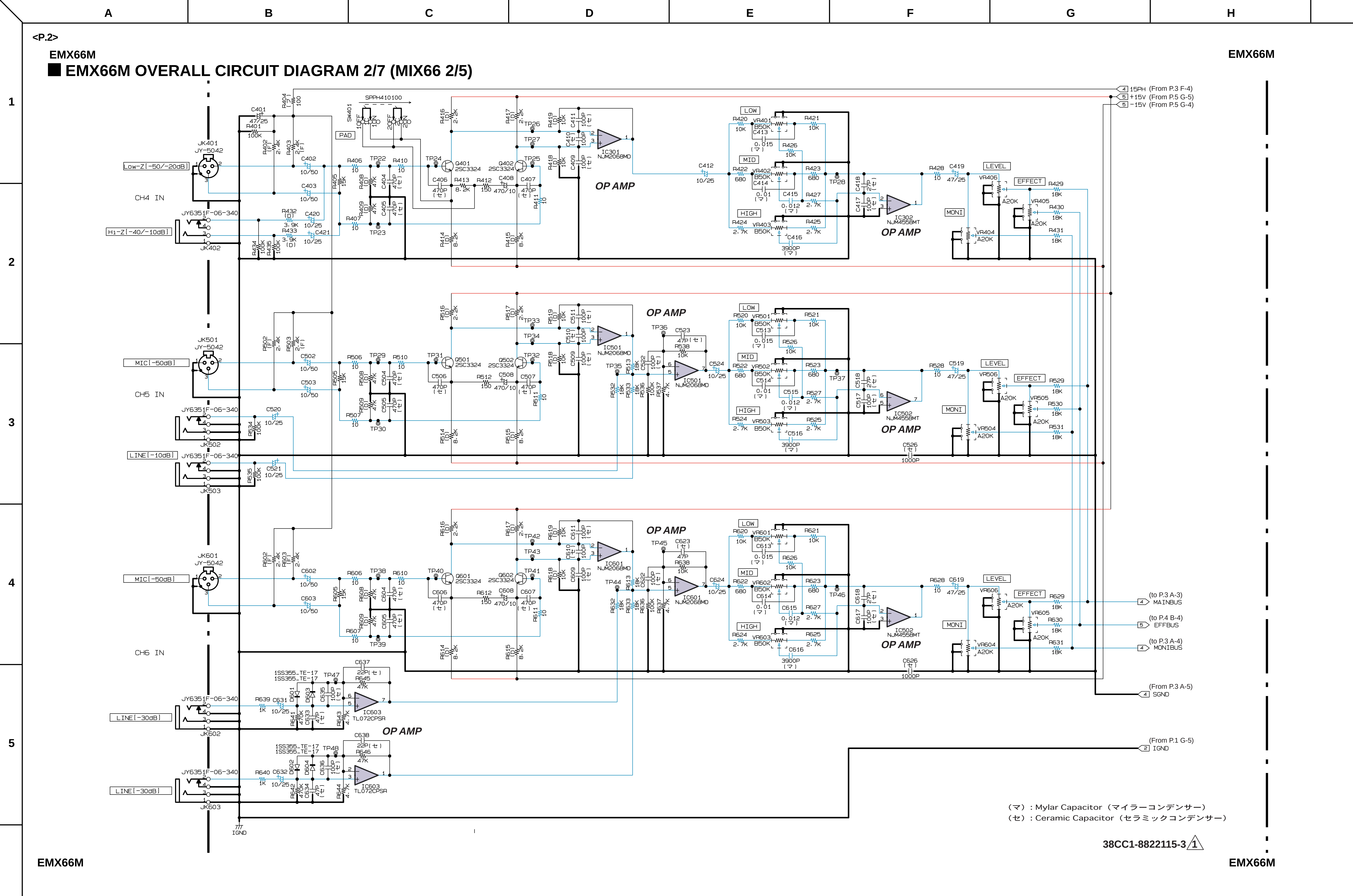
4.1 Power Supply Voltage Variation

Change the voltage of power supply in the range of ±10%, and confirm that the system works normally.

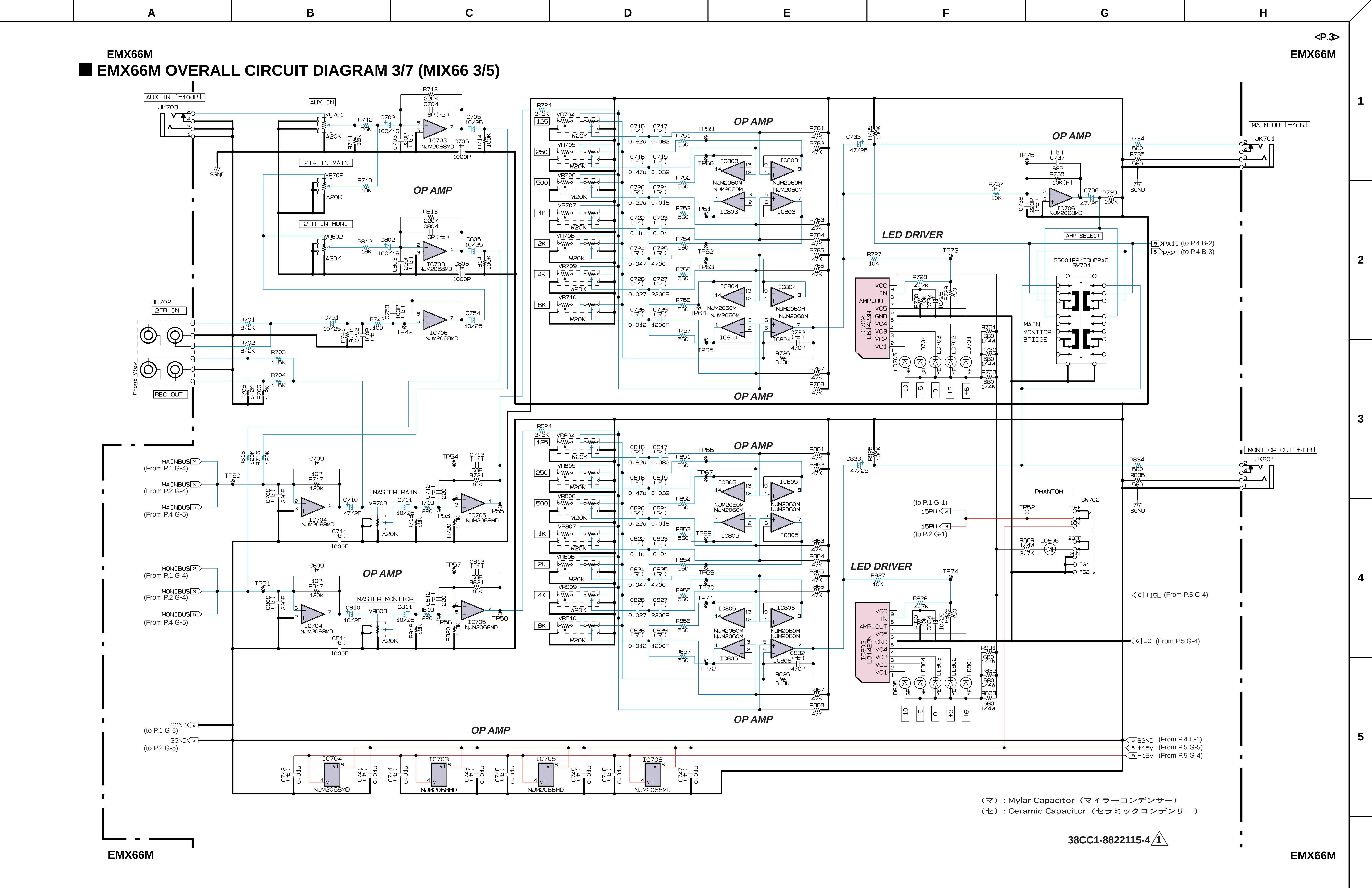
■ EMX66M OVERALL CIRCUIT DIAGRAM 1/7 (MIX66 1/5)



EMX66M OVERALL CIRCUIT DIAGRAM 2/7 (MIX66 2/5)



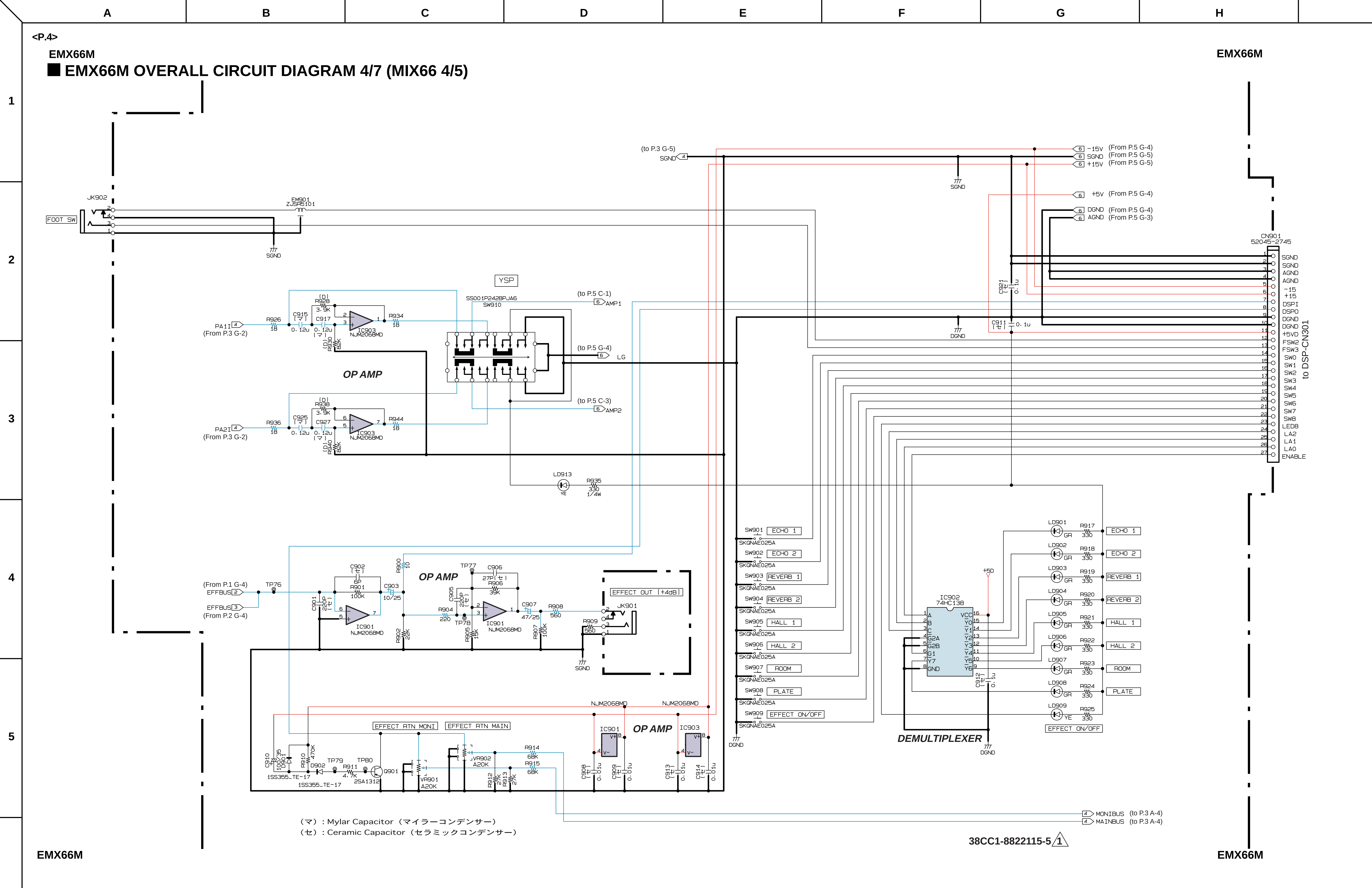
■ EMX66M OVERALL CIRCUIT DIAGRAM 3/7 (MIX66 3/5)



EMX66M

EMX66M

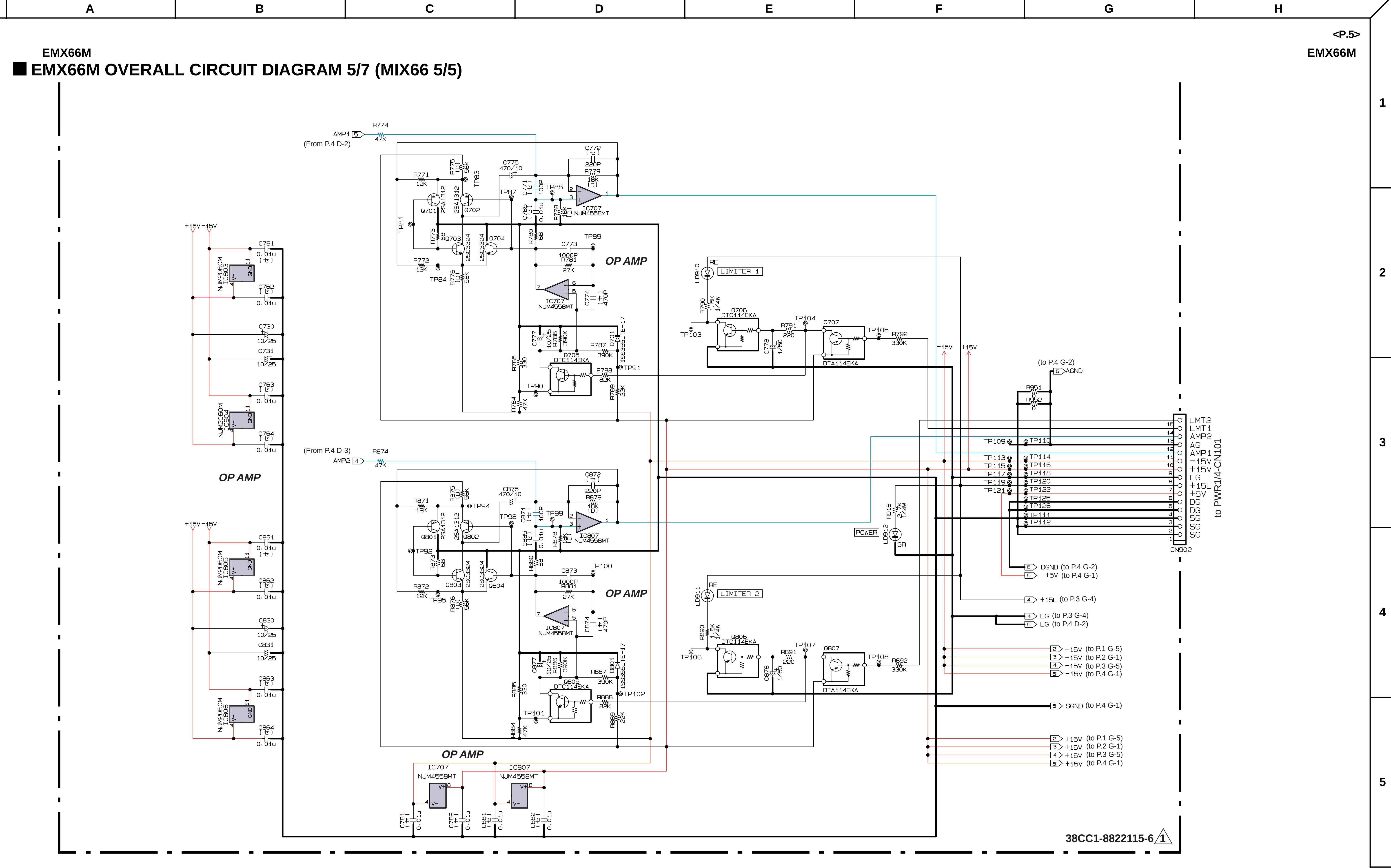
■ EMX66M OVERALL CIRCUIT DIAGRAM 4/7 (MIX66 4/5)



（マ）：Mylar Capacitor（マイラーコンデンサー）
（セ）：Ceramic Capacitor（セラミックコンデンサー）

38CC1-8822115-5 1

EMX66M OVERALL CIRCUIT DIAGRAM 5/7 (MIX66 5/5)



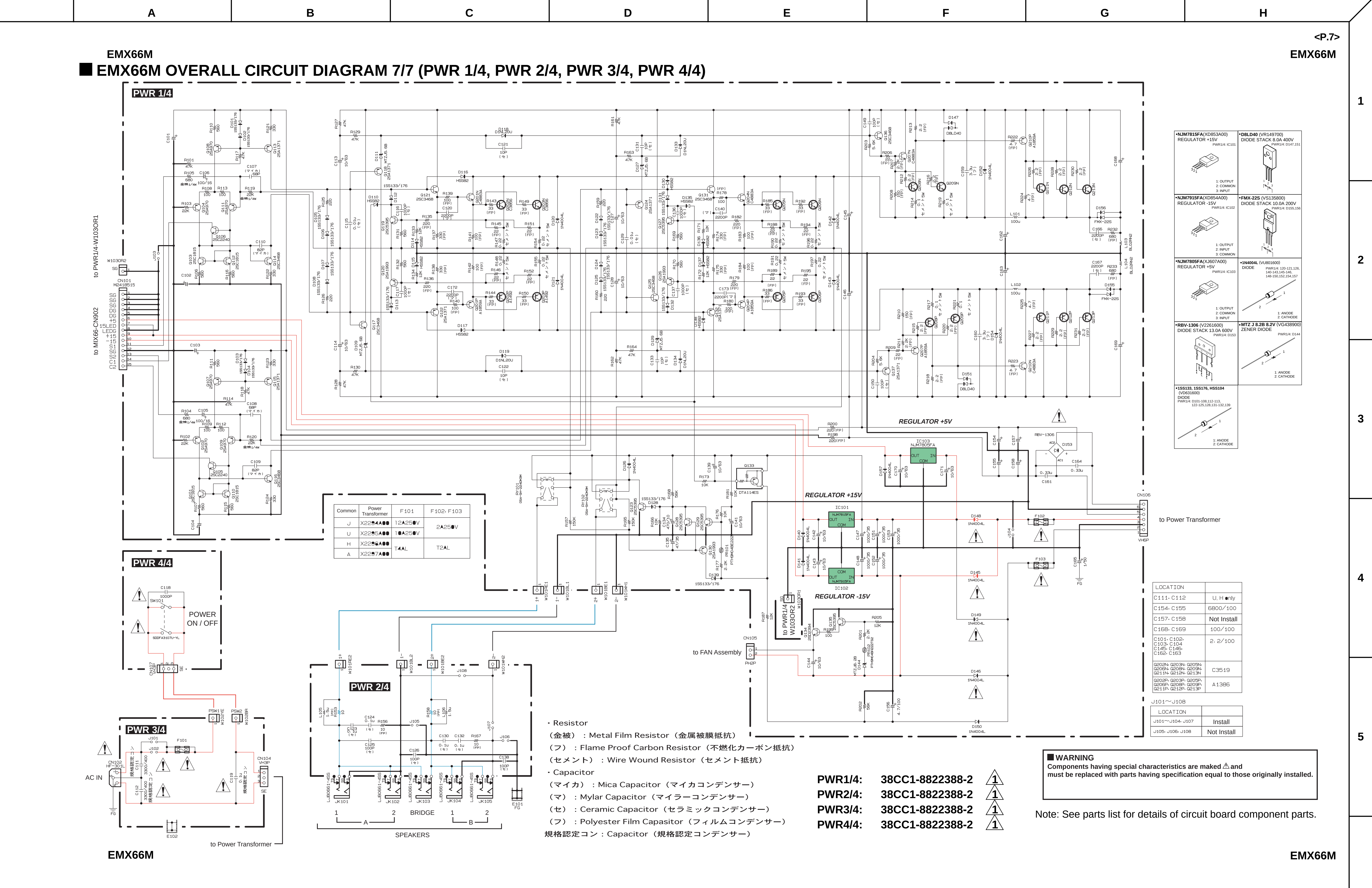
（セ）: Ceramic Capacitor（セラミックコンデンサー）

■ EMX66M OVERALL CIRCUIT DIAGRAM 6/7 (DSP)



（マ）: Mylar Capacitor（マイラーコンデンサー）
（セ）: Ceramic Capacitor（セラミックコンデンサー）

■ EMX66M OVERALL CIRCUIT DIAGRAM 7/7 (PWR 1/4, PWR 2/4, PWR 3/4, PWR 4/4)



Common	Power Transformer	F101	F102, F103
J	X2294A00	12A250V	2A250V
U	X2295A00	10A250V	
H	X2296A00	T4AL	T2AL
A	X2297A00		

LOCATION	
C111, C112	U, H only
C154, C155	6800/100
C157, C158	Not Install
C168, C169	100/100
C101, C102, C103, C104 C145, C146, C162, C163	2. 2/100
Q202N, Q203N, Q205N, Q206N, Q208N, Q209N, Q211N, Q212N, Q213N	C3519
Q202P, Q203P, Q205P, Q206P, Q208P, Q209P, Q211P, Q212P, Q213P	A1386

J101～J108

LOCATION	
J101～J104, J107	Install
J105, J106, J108	Not Install

・Resistor
（金被）：Metal Film Resistor（金属皮膜抵抗）
（フ）：Flame Proof Carbon Resistor（不燃化カーボン抵抗）
（セメント）：Wire Wound Resistor（セメント抵抗）
・Capacitor
（マイカ）：Mica Capacitor（マイカコンデンサー）
（マ）：Mylar Capacitor（マイラーコンデンサー）
（セ）：Ceramic Capacitor（セラミックコンデンサー）
（フ）：Polyester Film Capasitor（フィルムコンデンサー）
規格認定コン：Capacitor（規格認定コンデンサー）

PWR1/4: 38CC1-8822388-2 ⚠1
PWR2/4: 38CC1-8822388-2 ⚠1
PWR3/4: 38CC1-8822388-2 ⚠1
PWR4/4: 38CC1-8822388-2 ⚠1

■ **WARNING**
Components having special characteristics are maked ⚠ and must be replaced with parts having specification equal to those originally installed.

Note: See parts list for details of circuit board component parts.



PARTS LIST

RACK MOUNT KIT
RK-88

■ **CONTENTS**

Note) DESTINATION ABBREVIATIONS

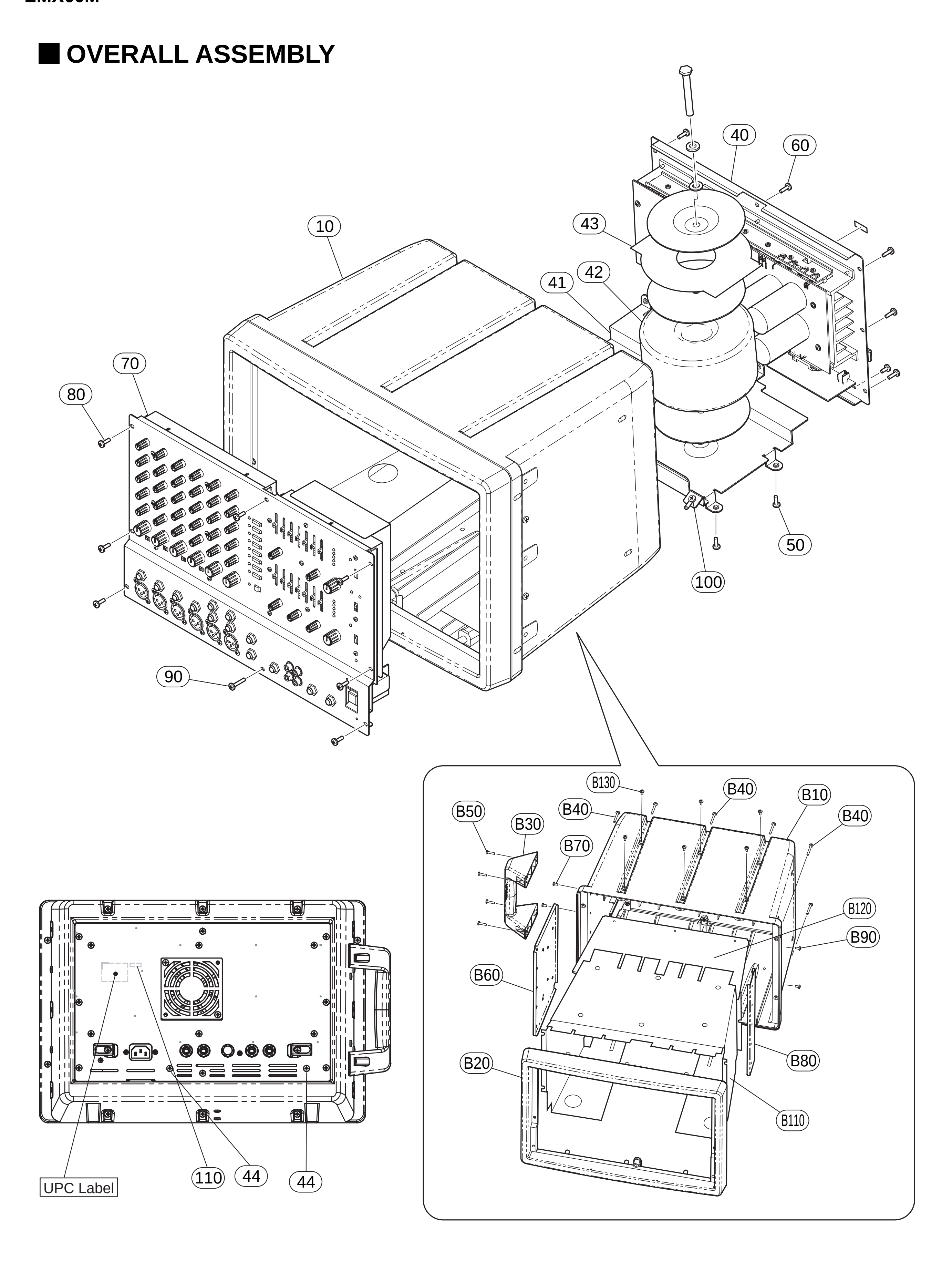
A:	Australian model	M:	South African model
B:	British model	O:	Chinese model
C:	Canadian model	Q:	South-east Asia model
D:	German model	T:	Taiwan model
E:	European model	U:	U.S.A. model
F:	French model	V:	General export model (110V)
H:	North European model	W:	General export model (220V)
I:	Indonesian model	N,X:	General export model
J:	Japanese model	Y:	Export model

■ **WARNING**

Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.

- The numbers in " QTY " show quantities for each unit.
- The parts with " - - " in " PART NO. " are not available as spare parts.
- The mark " } " in the remarks column indicates that these parts are interchangeable.
- The second letter of the shaded ( ) part number is O, not zero.
- The second letter of the shaded ( ) part number is I, not one.

OVERALL ASSEMBLY

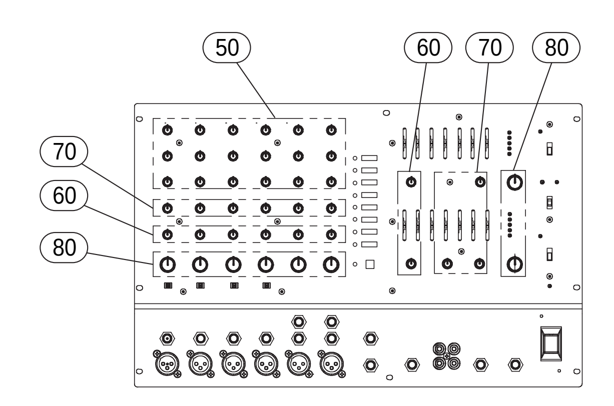


	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
			OVERALL ASSEMBLY					
		--	Overall Assembly	J		J (V832670)		
		--	Overall Assembly	U		U,V (V832680)		
		--	Overall Assembly	H		H,B,W (V832690)		
		--	Overall Assembly	A		A (V832700)		
	10	--	Body Assembly	J COM		(V832150)		
	40	--	Rear Panel Assembly	J		J (V832780)		
	40	--	Rear Panel Assembly	U		U (V832790)		
	40	--	Rear Panel Assembly	H		H (V832800)		
	40	--	Rear Panel Assembly	A		A (V832810)		
*	41	V7871800	Holder, Transformer					
⚠ *	42	X2294A00	Power Transformer			J		
⚠ *	42	X2295A00	Power Transformer	UL		U, V		
⚠ *	42	X2296A00	Power Transformer	CE A		H, B, W		
⚠ *	42	X2297A00	Power Transformer	AS A		A		
*	43	V7019800	Shield Plate	CP2000				
	44	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL			2	01
	50	VR138400	Bind Head Tapping Screw-B	4.0X12 MFZN2BL			6	01
	60	VB132700	Bind Head Screw	4.0X12 MFZN2BL			8	01
	70	--	Front Panel Assembly	J COM		(V832820)		
	80	VB132700	Bind Head Screw	4.0X12 MFZN2BL			7	01
	90	VB403600	Bind Head Screw	4.0X20 MFZN2BL				01
	100	VP156800	Bind Head Screw	A4.0X8 MFZN2BL				01
	110	VA039300	Label, Date Code			U		03
			BODY ASSEMBLY					
		--	Body Assembly	J COM		(V832150)		
*	B10	V8322500	Body Assembly, Sub	J COM				
*	B20	V8322600	Front Frame, Sub	J COM				
*	B30	V8419500	Handle Assembly	J COM				
*	B40	V8322700	Bind Head Tapping Screw-P	4.0X30 MFZN2BL			10	
	B50	EG340110	Bind Head Screw	4.0X16 MFZN2BL			4	01
	B60	--	Side Plate	LEFT		(V839690)		
	B70	EG340360	Bind Head Screw	4.0X8 MFZN2BL			4	01
	B80	--	Side Plate	RIGHT		(V839700)		
	B90	EG340360	Bind Head Screw	4.0X8 MFZN2BL			2	01
*	B110	V8183300	Shield Sheet					
	B120	--	Reinforcement Plate			(V850510)		
	B130	EG340360	Bind Head Screw	4.0X8 MFZN2BL			6	01
			ACCESSORIES					
		V6283900	AC Cord	BS H05VV-F3X0.75		B		
		V6284300	AC Cord	UC SJT		U, V		
		V6284400	AC Cord	E H05VV-FX3 0.75		H, W, A		
		V7240300	AC Cord	J VCTF 0.75X3		J		

*: New Parts

RANK: Japan only

■ FRONT PANEL ASSEMBLY



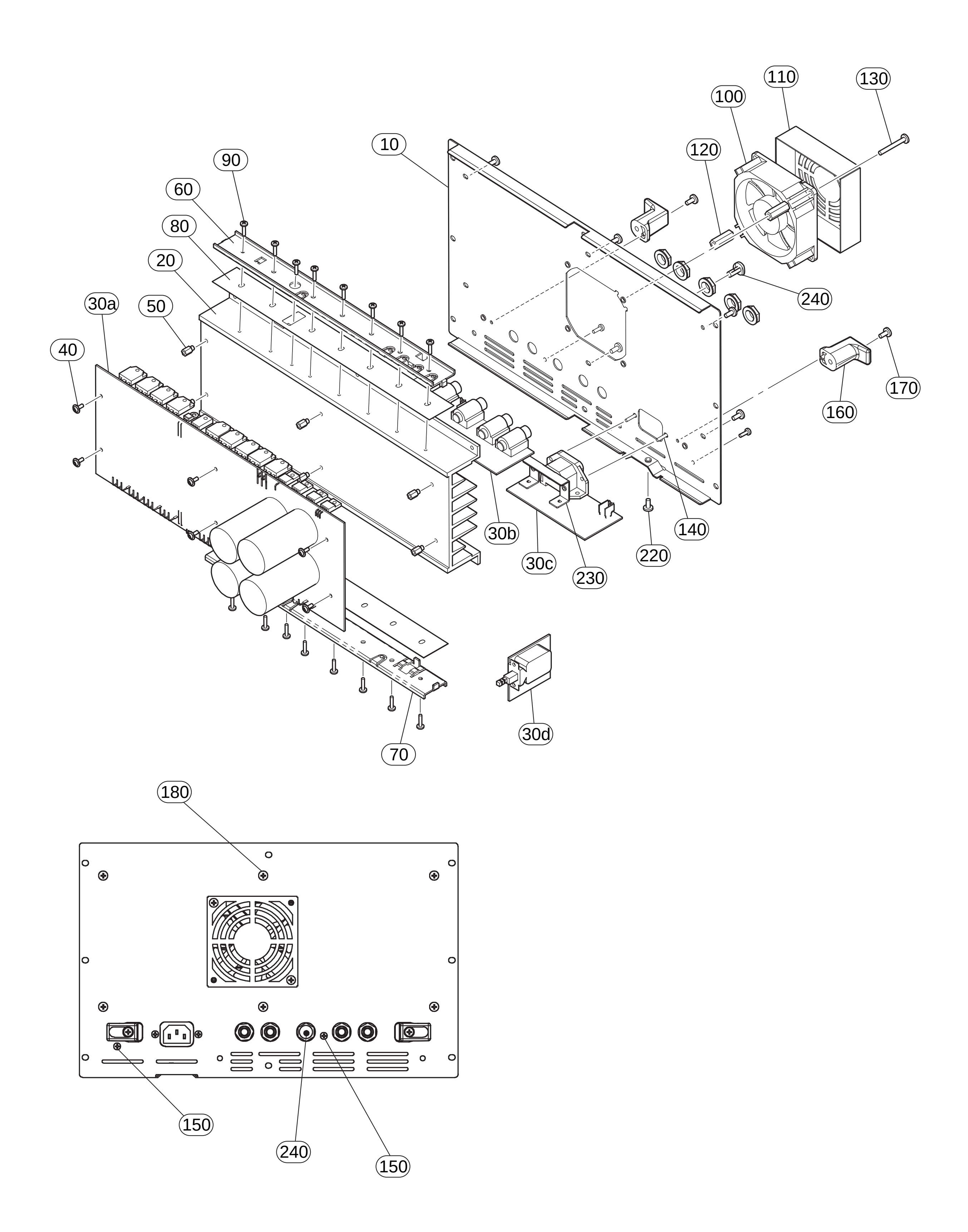
240
230
150
220
20
120
210
160
10
40
130
41
170
180
30
90
190
200
110
100

	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
			FRONT PANEL ASSEMBLY					
		--	Front Panel Assembly	J COM		(V832820)		
*	10	V8329300	Front Panel					
*	20	V8266900	Circuit Board	MIX66				
	30	V3291600	PCB Support	NEW NIFCO BL			15	01
	40	V3289800	Screw	3X25 MFZNBL			15	01
	41	VN413300	Bonding Tapping Screw-B	3.0X8 MFZN2BL			13	01
	50	V6225300	Knob	GREEN/M-GRAY		HIGH (CH1-6), MID(CH1-6),	18	01
						LOW (CH1-6)		
	60	V6225600	Knob	L-GRAY/M-GRAY		EFFECT (CH1-6),	8	01
						EFFECT RTN		
	70	V6225400	Knob	BLUE/M-GRAY		(MONITOR,MAIN)	9	01
						MONITOR (CH1-6),		
	80	V6225700	Knob	L-GRAY/D-GRAY		2TR IN (MONITOR, MAIN)	8	01
						LEVEL (CH1-6),		
						MASTER (MONITOR, MAIN)		
	90	VB659000	Bind Head Screw	3.0X8 MFZN2BL			2	01
	100	VU859100	Escutcheon, Power Switch	MX12/4				02
	110	VU859000	Power Switch Knob	MX12/4		POWER ON/OFF		01
*	120	AAX33040	Circuit Board	DSP-ZFX		(V826710)		
	130	EP600230	Bind Head Tapping Screw-B	3.0X6 MFZN2BL			4	01
	150	--	Shield Case			(V787200)		
	160	EP600230	Bind Head Tapping Screw-B	3.0X6 MFZN2BL			2	01
*	170	MF127100	Connector Assembly	27 100mm P=1.25				
*	180	V8426200	Connector Assembly	24185&2426 15P700L				
	190	--	Connector Assembly	GND		(V827280)		
	200	VP156800	Bind Head Screw	A4.0X8 MFZN2BL				01
*	210	V8422000	Button					
	220	--	Shield Plate			(V841270)		
	230	EP600230	Bind Head Tapping Screw-B	3.0X6 MFZN2BL			6	01
	240	VZ765100	Cord Binder	TS-0708 KSS				02

*: New Parts

RANK: Japan only

■ REAR PANEL ASSEMBLY



	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
			REAR PANEL ASSEMBLY					
		--	Rear Panel Assembly	J		J (V832780)		
		--	Rear Panel Assembly	U		U (V832790)		
		--	Rear Panel Assembly	H		H (V832800)		
		--	Rear Panel Assembly	A		A (V832810)		
*	10	V8328800	Rear Panel	J		J		
*	10	V8328900	Rear Panel	U		U		
*	10	V8329000	Rear Panel	H		H		
*	10	V8329100	Rear Panel	A		A		
	20	--	Heat Sink			(V787110)		
*	30a	AAX32870	Circuit Board	PWR B66 1/4		J, U (V826870, V826880)		
*	30a	AAX32880	Circuit Board	PWR B66 1/4		H, A (V826890)		
*	30b	AAX32890	Circuit Board	PWR B66 2/4		(V826870)		
*	30c	AAX32900	Circuit Board	PWR B66 3/4		J (V826870)		
*	30c	AAX32910	Circuit Board	PWR B66 3/4		U (V826880)		
*	30c	AAX32920	Circuit Board	PWR B66 3/4		H, A (V826890)		
*	30d	AAX32930	Circuit Board	PWR B66 4/4		(V826870)		
	40	EG330290	Bind Head Screw	SP 3.0X8 MFZN2Y			6	01
	50	VV086500	Support	H=7.4 B=5.5			6	01
	60	--	TR Holder A			(V521320)		
	70	--	TR Holder B			(V521330)		
	80	V5214900	Insulation Sheet				2	03
	90	VQ074600	Bind Head Tapping Screw-B	3.0X12 MFZN2BL			16	01
	100	V6147300	Fan	3110GLB5WB50H02				08
	110	V2951400	Angle Bracket, Fan					03
	120	--	Support			(V813390)	2	
	130	VT229100	Bind Head Screw	4.0X30 MFZN2BL			2	01
	140	VQ074600	Bind Head Tapping Screw-B	3.0X12 MFZN2BL			2	01
	150	VN413300	Bonding Tapping Screw-B	3.0X8 MFZN2BL			2	01
	160	V4773400	Holder, Cord				2	
	170	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL			2	01
	180	EG340190	Bind Head Tapping Screw-B	4.0X8 MFZN2BL			6	01
	220	VP156800	Bind Head Screw	A4.0X8 MFZN2BL				01
*	230	V8098800	Angle Bracket, AC Inlet					
	240	V7646900	Clip	F1B84 TIFCO				01

*: New Parts

RANK: Japan only

ELECTRICAL PARTS

	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
			ELECTRICAL PARTS					
*		AAX33040	Circuit Board	DSP-ZFX		(V826710) (X0622B0)		
*		V8266900	Circuit Board	MIX66		(X0619B0)		
*		AAX32870	Circuit Board	PWR B66 1/4		J, U (V826870) (X0623B0)		
*		AAX32880	Circuit Board	PWR B66 1/4		H, A (V826890) (X0623B0)		
*		AAX32890	Circuit Board	PWR B66 2/4		(V826870) (X0623B0)		
*		AAX32900	Circuit Board	PWR B66 3/4		J (V826870) (X0623B0)		
*		AAX32910	Circuit Board	PWR B66 3/4		U (V826880) (X0623B0)		
*		AAX32920	Circuit Board	PWR B66 3/4		H, A (V826890) (X0623B0)		
*		AAX32930	Circuit Board	PWR B66 4/4		(V826870) (X0623B0)		
*		AAX33040	Circuit Board	DSP-ZFX		(V826710) (X0622B0)		
	C301	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C302	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C303	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C304	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C305	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C306	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C307	UA953270	Mylar Capacitor	2700P 50V J				01
	C308	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C309	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C310	VV190000	Mylar Capacitor	820P 50V J				01
	C311	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C312	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C313	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C314	UA953820	Mylar Capacitor	8200P 50V J				
	C315	UR847100	Electrolytic Cap.	10.00 25.0V				01
	-317	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C318	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C319	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C320	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C321	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C322	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C323	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C324	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C325	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C326	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C327	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C328	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	-331	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C332	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C333	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C334	UR838100	Electrolytic Cap.	100.00 16.0V				01
	C335	UR828470	Electrolytic Cap.	470.00 10.0V				01
	C336	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C338	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	-340	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C400	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	-408	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C409	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	-413	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C501	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C502	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	CN301	VQ045600	Connector , FFC	52044 27P SE				03
	D301	VT332900	Diode	1SS355 TE-17				01
	EM301	GE300670	Ferrite Bead	BL02RN2-R62T4				02
	EM302	GE300670	Ferrite Bead	BL02RN2-R62T4				02
	EM304	VV056900	Noise Filter	ZJSR5101-223TA				01
	-307	VV056900	Noise Filter	ZJSR5101-223TA				01
	EM308	GE300670	Ferrite Bead	BL02RN2-R62T4				02
	-312	GE300670	Ferrite Bead	BL02RN2-R62T4				02
*	IC301	X2124A00	IC	93LC46B-I/SN-N		EEPROM 2K		
	IC302	XZ110A00	IC	74HCU04DT		INVERTER		01
	IC303	XY296A00	IC	UPD78082GB-XXX		MCU		05
	IC304	IG103520	IC	NJM4558M(T1)		OP AMP		03
	IC305	X0053A00	IC	PCM3001E/2K		ADA		07
	IC306	XY297A00	IC	ZFX-2		CPU		13
	IC307	XT810B00	IC	MSM514260E-60TS-K		DRAM 4M		07
	Q301	VV655400	Digital Transistor	DTC114EKA TP				01

*: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	Q302	VV556400	Transistor	2SC2412K Q,R,S				01
	Q303	VV556400	Transistor	2SC2412K Q,R,S				01
	Q304	VV655000	Digital Transistor	DTA114EKA TP				01
	Q305	VV655400	Digital Transistor	DTC114EKA TP				01
	Q306	VD303700	Transistor	2SC3326 A,B TE85R				01
	R301	RG005100	Carbon Resistor (chip)	100 0.1 J				
	-315	RG005100	Carbon Resistor (chip)	100 0.1 J				
	R316	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R317	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R318	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R319	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R320	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R321	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	-330	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R331	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R332	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R333	RG006100	Carbon Resistor (chip)	1.0K 0.1 J				
	R334	RG009100	Carbon Resistor (chip)	1.0M 0.1 J				
	R335	RG009100	Carbon Resistor (chip)	1.0M 0.1 J				
	R336	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R337	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R338	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	-342	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R343	RG006100	Carbon Resistor (chip)	1.0K 0.1 J				
	R344	RG007270	Carbon Resistor (chip)	27K 0.1 J				
	R345	RG006300	Carbon Resistor (chip)	3.0K 0.1 J				
	R346	RG007300	Carbon Resistor (chip)	30K 0.1 J				
	R347	RG009100	Carbon Resistor (chip)	1.0M 0.1 J				
	R348	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R349	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R350	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R351	RG006100	Carbon Resistor (chip)	1.0K 0.1 J				
	R352	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R353	RG007680	Carbon Resistor (chip)	68K 0.1 J				
*	R354	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R355	RG006130	Carbon Resistor (chip)	1.3K 0.1 J				
	R356	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R357	VV313600	Flame Proof C. Resistor	2.2 1/4 J				01
	-359	VV313600	Flame Proof C. Resistor	2.2 1/4 J				01
	R361	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	-363	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R400	RG005100	Carbon Resistor (chip)	100 0.1 J				
	R401	RG006100	Carbon Resistor (chip)	1.0K 0.1 J				
	R402	RG000000	Carbon Resistor (chip)	0 0.1 J				
	R403	RG000000	Carbon Resistor (chip)	0 0.1 J				
*	X301	V8288200	Ceramic Resonator	0.3% 4.0MHZ				
*		V8266900	Circuit Board	MIX66		(X0619B0)		
		V4467500	Button	CD-GRAY/WHITE		PAD (CH1-4)	4	01
		VV307300	LED Spacer				24	01
	20	--	Jumper Wire	0.60		(VV29140)		
	30	--	Jumper Wire	0.60 TP		(V829020)		
	C101	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C102	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C103	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C104	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	-107	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C108	UR828470	Electrolytic Cap.	470.00 10.0V				01
	C109	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	-111	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C112	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C113	UA954150	Mylar Capacitor	0.0150 50V J				01
	C114	UA954100	Mylar Capacitor	0.0100 50V J				01
	C115	UA954120	Mylar Capacitor	0.0120 50V J				
	C116	UA953390	Mylar Capacitor	3900P 50V J				01
	C117	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
*	C118	UX061270	Ceramic Capacitor (chip)	27P 50V J				
	C119	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C120	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C121	UR847100	Electrolytic Cap.	10.00 25.0V				01

*: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	C122	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	-125	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C126	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
	C202	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C203	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C204	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	-207	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C208	UR828470	Electrolytic Cap.	470.00 10.0V				01
	C209	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	-211	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C212	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C213	UA954150	Mylar Capacitor	0.0150 50V J				01
	C214	UA954100	Mylar Capacitor	0.0100 50V J				01
	C215	UA954120	Mylar Capacitor	0.0120 50V J				
	C216	UA953390	Mylar Capacitor	3900P 50V J				01
	C217	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
*	C218	UX061270	Ceramic Capacitor (chip)	27P 50V J				
	C219	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C220	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C221	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C302	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C303	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C304	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	-307	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C308	UR828470	Electrolytic Cap.	470.00 10.0V				01
	C309	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	-311	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C312	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C313	UA954150	Mylar Capacitor	0.0150 50V J				01
	C314	UA954100	Mylar Capacitor	0.0100 50V J				01
	C315	UA954120	Mylar Capacitor	0.0120 50V J				
	C316	UA953390	Mylar Capacitor	3900P 50V J				01
	C317	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
*	C318	UX061270	Ceramic Capacitor (chip)	27P 50V J				
	C319	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C320	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C321	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C322	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	-325	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C326	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
	C401	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C402	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C403	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C404	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	-407	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C408	UR828470	Electrolytic Cap.	470.00 10.0V				01
	C409	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	-411	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C412	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C413	UA954150	Mylar Capacitor	0.0150 50V J				01
	C414	UA954100	Mylar Capacitor	0.0100 50V J				01
	C415	UA954120	Mylar Capacitor	0.0120 50V J				
	C416	UA953390	Mylar Capacitor	3900P 50V J				01
	C417	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
*	C418	UX061270	Ceramic Capacitor (chip)	27P 50V J				
	C419	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C420	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C421	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C502	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C503	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C504	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	-507	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C508	UR828470	Electrolytic Cap.	470.00 10.0V				01
	C509	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	-511	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C513	UA954150	Mylar Capacitor	0.0150 50V J				01
	C514	UA954100	Mylar Capacitor	0.0100 50V J				01
	C515	UA954120	Mylar Capacitor	0.0120 50V J				
	C516	UA953390	Mylar Capacitor	3900P 50V J				01
	C517	UX062100	Ceramic Capacitor (chip)	100P 50V J				01

*: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
*	C518	UX061270	Ceramic Capacitor (chip)	27P 50V J				
	C519	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C520	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C521	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C522	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C523	UX061470	Ceramic Capacitor (chip)	47P 50V J				
	C524	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C526	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
	C527	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	-530	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C602	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C603	VV488800	Electrolytic Cap. LLM	10.00 50.0V				01
	C604	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	-607	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C608	UR828470	Electrolytic Cap.	470.00 10.0V				01
	C609	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	-611	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C613	UA954150	Mylar Capacitor	0.0150 50V J				01
	C614	UA954100	Mylar Capacitor	0.0100 50V J				01
	C615	UA954120	Mylar Capacitor	0.0120 50V J				
	C616	UA953390	Mylar Capacitor	3900P 50V J				01
	C617	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
*	C618	UX061270	Ceramic Capacitor (chip)	27P 50V J				
	C619	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C622	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C623	UX061470	Ceramic Capacitor (chip)	47P 50V J				
	C624	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C626	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
	C627	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	-630	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C631	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C632	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C633	UX061470	Ceramic Capacitor (chip)	47P 50V J				
	C634	UX061470	Ceramic Capacitor (chip)	47P 50V J				
	C635	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C636	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
	C637	UX061220	Ceramic Capacitor (chip)	22P 50V J				01
	C638	UX061220	Ceramic Capacitor (chip)	22P 50V J				01
	C702	UR838100	Electrolytic Cap.	100.00 16.0V				01
	C703	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
*	C704	UX060600	Ceramic Capacitor (chip)	6P 50V C				
	C705	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C706	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
	C708	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
	C709	UX061100	Ceramic Capacitor (chip)	10P 50V D				01
	C710	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C711	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C712	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
	C713	UX061680	Ceramic Capacitor (chip)	68P 50V J				01
	C714	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
	C716	UA655820	Mylar Capacitor	0.8200 50V J				01
	C717	UA954820	Mylar Capacitor	0.0820 50V J				01
	C718	UA655470	Mylar Capacitor	0.4700 50V J				01
	C719	UA954390	Mylar Capacitor	0.0390 50V J				01
	C720	UA655220	Mylar Capacitor	0.2200 50V J				01
	C721	UA954180	Mylar Capacitor	0.0180 50V J				01
	C722	V5868900	Mylar Capacitor	0.1 50V J				
	C723	UA954100	Mylar Capacitor	0.0100 50V J				01
	C724	UA954470	Mylar Capacitor	0.0470 50V J				01
	C725	UA953470	Mylar Capacitor	4700P 50V J				01
	C726	UA954270	Mylar Capacitor	0.0270 50V J				01
	C727	UA953220	Mylar Capacitor	2200P 50V J				01
	C728	UA954120	Mylar Capacitor	0.0120 50V J				
	C729	UA953120	Mylar Capacitor	1200P 50V J				01
	C730	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C731	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C732	UX062470	Ceramic Capacitor (chip)	470P 50V J				
	C733	UR847470	Electrolytic Cap.	47.00 25.0V				01
	C734	UR847100	Electrolytic Cap.	10.00 25.0V				01
	C736	UX062220	Ceramic Capacitor (chip)	220P 50V J				01

*: New Parts

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REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
C737	UX061680	Ceramic Capacitor (chip)	68P 50V J				01
C738	UR847470	Electrolytic Cap.	47.00 25.0V				01
C741	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
-748	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C751	UR847100	Electrolytic Cap.	10.00 25.0V				01
C752	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
C753	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
C754	UR847100	Electrolytic Cap.	10.00 25.0V				01
C761	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
-764	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C771	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
C772	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
C773	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
C774	UX062470	Ceramic Capacitor (chip)	470P 50V J				
C775	UR828470	Electrolytic Cap.	470.00 10.0V				01
C777	UR847100	Electrolytic Cap.	10.00 25.0V				01
C778	UR866100	Electrolytic Cap.	1.00 50.0V				01
C781	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C782	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C785	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C802	UR838100	Electrolytic Cap.	100.00 16.0V				01
C803	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
* C804	UX060600	Ceramic Capacitor (chip)	6P 50V C				
C805	UR847100	Electrolytic Cap.	10.00 25.0V				01
C806	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
C808	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
C809	UX061100	Ceramic Capacitor (chip)	10P 50V D				01
C810	UR847100	Electrolytic Cap.	10.00 25.0V				01
C811	UR847100	Electrolytic Cap.	10.00 25.0V				01
C812	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
C813	UX061680	Ceramic Capacitor (chip)	68P 50V J				01
C814	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
C816	UA655820	Mylar Capacitor	0.8200 50V J				01
C817	UA954820	Mylar Capacitor	0.0820 50V J				01
C818	UA655470	Mylar Capacitor	0.4700 50V J				01
C819	UA954390	Mylar Capacitor	0.0390 50V J				01
C820	UA655220	Mylar Capacitor	0.2200 50V J				01
C821	UA954180	Mylar Capacitor	0.0180 50V J				01
C822	V5868900	Mylar Capacitor	0.1 50V J				
C823	UA954100	Mylar Capacitor	0.0100 50V J				01
C824	UA954470	Mylar Capacitor	0.0470 50V J				01
C825	UA953470	Mylar Capacitor	4700P 50V J				01
C826	UA954270	Mylar Capacitor	0.0270 50V J				01
C827	UA953220	Mylar Capacitor	2200P 50V J				01
C828	UA954120	Mylar Capacitor	0.0120 50V J				
C829	UA953120	Mylar Capacitor	1200P 50V J				01
C830	UR847100	Electrolytic Cap.	10.00 25.0V				01
C831	UR847100	Electrolytic Cap.	10.00 25.0V				01
C832	UX062470	Ceramic Capacitor (chip)	470P 50V J				
C833	UR847470	Electrolytic Cap.	47.00 25.0V				01
C834	UR847100	Electrolytic Cap.	10.00 25.0V				01
C861	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
-864	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C871	UX062100	Ceramic Capacitor (chip)	100P 50V J				01
C872	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
C873	UX063100	Ceramic Capacitor (chip)	1000P 50V K				01
C874	UX062470	Ceramic Capacitor (chip)	470P 50V J				
C875	UR828470	Electrolytic Cap.	470.00 10.0V				01
C877	UR847100	Electrolytic Cap.	10.00 25.0V				01
C878	UR866100	Electrolytic Cap.	1.00 50.0V				01
C881	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C882	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C885	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
C901	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
* C902	UX060600	Ceramic Capacitor (chip)	6P 50V C				
C903	UR847100	Electrolytic Cap.	10.00 25.0V				01
C905	UX062220	Ceramic Capacitor (chip)	220P 50V J				01
* C906	UX061270	Ceramic Capacitor (chip)	27P 50V J				
C907	UR847470	Electrolytic Cap.	47.00 25.0V				01
C908	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01

*: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	C909	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C910	UR858100	Electrolytic Cap.	100.00 35.0V				01
	C911	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C912	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C913	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C914	UX064100	Ceramic Capacitor (chip)	0.0100 50V K				01
	C915	UA655120	Mylar Capacitor	0.1200 50V J				01
	C917	UA655120	Mylar Capacitor	0.1200 50V J				01
	C921	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z				01
	C925	UA655120	Mylar Capacitor	0.1200 50V J				01
	C927	UA655120	Mylar Capacitor	0.1200 50V J				01
	CN901	VQ047800	Connector, FFC	52045 27P TE				02
	CN902	VV067500	Connector Base Post	M2426XX 15P TE				01
	D601	VT332900	Diode	1SS355 TE-17				01
	-604	VT332900	Diode	1SS355 TE-17				01
	D701	VT332900	Diode	1SS355 TE-17				01
	D801	VT332900	Diode	1SS355 TE-17				01
	D901	VT332900	Diode	1SS355 TE-17				01
	D902	VT332900	Diode	1SS355 TE-17				01
	EM901	VV056900	Noise Filter	ZJSR5101-223TA				01
	IC101	XJ553A00	IC	NJM2068MD-T1		OP AMP		02
	IC102	IG103520	IC	NJM4558M(T1)		OP AMP		03
	IC301	XJ553A00	IC	NJM2068MD-T1		OP AMP		02
	IC302	IG103520	IC	NJM4558M(T1)		OP AMP		03
	IC501	XJ553A00	IC	NJM2068MD-T1		OP AMP		02
	IC502	IG103520	IC	NJM4558M(T1)		OP AMP		03
	IC601	XJ553A00	IC	NJM2068MD-T1		OP AMP		02
*	IC603	XV423A00	IC	TL072CPSR		OP AMP		
	IC702	XZ348A00	IC	LB1423N		LED DRIVER		02
	IC703	XJ553A00	IC	NJM2068MD-T1		OP AMP		02
	-706	XJ553A00	IC	NJM2068MD-T1		OP AMP		02
	IC707	IG103520	IC	NJM4558M(T1)		OP AMP		03
	IC802	XZ348A00	IC	LB1423N		LED DRIVER		02
*	IC803	XM560A00	IC	NJM2060M(TE2)OP		OP AMP		
*	-806	XM560A00	IC	NJM2060M(TE2)OP		OP AMP		
	IC807	IG103520	IC	NJM4558M(T1)		OP AMP		03
	IC901	XJ553A00	IC	NJM2068MD-T1		OP AMP		02
	IC902	XW762A00	IC	TC74HC138AFEL		DEMULTIPLEXER		02
	IC903	XJ553A00	IC	NJM2068MD-T1		OP AMP		02
	JK101	V6127200	XLM Connector	JY-5042		Low-Z (CH1)		03
	JK102	V2886000	Phone Jack	JY-6351J-06-340		Hi-Z (CH1)		02
	JK201	V6127200	XLM Connector	JY-5042		Low-Z (CH2)		03
	JK202	V2886000	Phone Jack	JY-6351J-06-340		Hi-Z (CH2)		02
	JK301	V6127200	XLM Connector	JY-5042		Low-Z (CH3)		03
	JK302	V2886000	Phone Jack	JY-6351J-06-340		Hi-Z (CH3)		02
	JK401	V6127200	XLM Connector	JY-5042		Low-Z (CH4)		03
	JK402	V2886000	Phone Jack	JY-6351J-06-340		Hi-Z (CH4)		02
	JK501	V6127200	XLM Connector	JY-5042		MIC (CH5)		03
	JK502	V2886000	Phone Jack	JY-6351J-06-340		LINE 1 (CH5)		02
	JK503	V2886000	Phone Jack	JY-6351J-06-340		LINE 2 (CH5)		02
	JK601	V6127200	XLM Connector	JY-5042		MIC (CH6)		03
	JK602	V2886000	Phone Jack	JY-6351J-06-340		Super Hi-Z 1 (CH6)		02
	JK603	V2886000	Phone Jack	JY-6351J-06-340		Super Hi-Z 2 (CH6)		02
	JK701	V2886000	Phone Jack	JY-6351J-06-340		OUTPUT MAIN		02
	JK702	V4807600	Pin Jack	RJ-1130A-01-0320A		2TR IN 1, 2		03
						REC OUT 1, 2		
	JK703	V2886000	Phone Jack	JY-6351J-06-340		AUX IN		02
	JK801	V2886000	Phone Jack	JY-6351J-06-340		OUTPUT MONITOR		02
	JK901	V2886000	Phone Jack	JY-6351J-06-340		EFFECT OUT		02
	JK902	V2886000	Phone Jack	JY-6351J-06-340		FOOT SW		02
*	LD701	V8840400	LED	L34YD-TNB5/13.6 YE		+6 (MAIN)		
*	LD702	V8840400	LED	L34YD-TNB5/13.6 YE		+3 (MAIN)		
*	LD703	V8840400	LED	L34YD-TNB5/13.6 YE		0 (MAIN)		
*	LD704	V8840200	LED	L34GD-TNB5/13.6 GR		-5 (MAIN)		
*	LD705	V8840200	LED	L34GD-TNB5/13.6 GR		-10 (MAIN)		
*	LD801	V8840400	LED	L34YD-TNB5/13.6 YE		+6 (MONITOR)		
*	LD802	V8840400	LED	L34YD-TNB5/13.6 YE		+3 (MONITOR)		
*	LD803	V8840400	LED	L34YD-TNB5/13.6 YE		0 (MONITOR)		
*	LD804	V8840200	LED	L34GD-TNB5/13.6 GR		-5 (MONITOR)		
*	LD805	V8840200	LED	L34GD-TNB5/13.6 GR		-10 (MONITOR)		

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
*	LD806	V8840400	LED	L34YD-TNB5/13.6 YE		PHANTOM		
*	LD901	V8840200	LED	L34GD-TNB5/13.6 GR		VOCAL ECHO 1		
*	LD902	V8840200	LED	L34GD-TNB5/13.6 GR		VOCAL ECHO 2		
*	LD903	V8840200	LED	L34GD-TNB5/13.6 GR		VOCAL REVERB 1		
*	LD904	V8840200	LED	L34GD-TNB5/13.6 GR		VOCAL REVERB 2		
*	LD905	V8840200	LED	L34GD-TNB5/13.6 GR		HALL 1		
*	LD906	V8840200	LED	L34GD-TNB5/13.6 GR		HALL 2		
*	LD907	V8840200	LED	L34GD-TNB5/13.6 GR		ROOM		
*	LD908	V8840200	LED	L34GD-TNB5/13.6 GR		PLATE		
*	LD909	V8840400	LED	L34YD-TNB5/13.6 YE		EFFECT ON		
*	LD910	V8840100	LED	L34HD-TNB5/13.6 RE		LIMITER		
*	LD911	V8840100	LED	L34HD-TNB5/13.6 RE		LIMITER		
*	LD912	V8840200	LED	L34GD-TNB5/13.6 GR		POWER		
*	LD913	V8840400	LED	L34YD-TNB5/13.6 YE		YSP		
*	Q101	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q102	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q201	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q202	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q301	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q302	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q401	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q402	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q501	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q502	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q601	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q602	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q701	V7421800	Transistor	2SA2SA1312 GR,BL				
*	Q702	V7421800	Transistor	2SA2SA1312 GR,BL				
*	Q703	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q704	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
	Q705	VV655400	Digital Transistor	DTC114EKA TP				01
	Q706	VV655400	Digital Transistor	DTC114EKA TP				01
	Q707	VV655000	Digital Transistor	DTA114EKA TP				01
*	Q801	V7421800	Transistor	2SA2SA1312 GR,BL				
*	Q802	V7421800	Transistor	2SA2SA1312 GR,BL				
*	Q803	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
*	Q804	V7421700	Transistor (chip)	2SC2SC3324 GR,BL				
	Q805	VV655400	Digital Transistor	DTC114EKA TP				01
	Q806	VV655400	Digital Transistor	DTC114EKA TP				01
	Q807	VV655000	Digital Transistor	DTA114EKA TP				01
*	Q901	V7421800	Transistor	2SA2SA1312 GR,BL				
	R101	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R102	V2440200	Metal Film Resistor	2.4K 1/4 F				01
	R103	V2440200	Metal Film Resistor	2.4K 1/4 F				01
	R104	VV276800	Flame Proof C. Resistor	100 1/4 J				01
*	R105	RG007150	Carbon Resistor (chip)	15K 0.1 J				
	R106	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R107	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R108	RF357470	Carbon Resistor (chip)	47.0K D 1608				
*	R109	RF357470	Carbon Resistor (chip)	47.0K D 1608				
	R110	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R111	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R112	RG005150	Carbon Resistor (chip)	150 0.1 J				
	R113	RG006820	Carbon Resistor (chip)	8.2K 0.1 J				
*	R114	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R115	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R116	RF356220	Carbon Resistor (chip)	2.2K D 1608				
*	R117	RF356220	Carbon Resistor (chip)	2.2K D 1608				
	R118	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R119	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R120	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R121	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R122	RG005680	Carbon Resistor (chip)	680				
	R123	RG005680	Carbon Resistor (chip)	680				
	R124	RG006270	Carbon Resistor (chip)	2.7K				
	R125	RG006270	Carbon Resistor (chip)	2.7K				
	R126	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R127	RG006270	Carbon Resistor (chip)	2.7K				
	R128	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R129	RG007180	Carbon Resistor (chip)	18K 0.1 J				

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	-131	RG007180	Carbon Resistor (chip)	18K 0.1 J				
*	R132	RF356390	Carbon Resistor (chip)	3.9K D 1608				
*	R133	RF356390	Carbon Resistor (chip)	3.9K D 1608				
	R134	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R135	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R202	V2440200	Metal Film Resistor	2.4K 1/4 F				01
	R203	V2440200	Metal Film Resistor	2.4K 1/4 F				01
*	R205	RG007150	Carbon Resistor (chip)	15K 0.1 J				
	R206	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R207	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R208	RF357470	Carbon Resistor (chip)	47.0K D 1608				
*	R209	RF357470	Carbon Resistor (chip)	47.0K D 1608				
	R210	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R211	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R212	RG005150	Carbon Resistor (chip)	150 0.1 J				
	R213	RG006820	Carbon Resistor (chip)	8.2K 0.1 J				
*	R214	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R215	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R216	RF356220	Carbon Resistor (chip)	2.2K D 1608				
*	R217	RF356220	Carbon Resistor (chip)	2.2K D 1608				
	R218	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R219	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R220	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R221	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R222	RG005680	Carbon Resistor (chip)	680				
	R223	RG005680	Carbon Resistor (chip)	680				
	R224	RG006270	Carbon Resistor (chip)	2.7K				
	R225	RG006270	Carbon Resistor (chip)	2.7K				
	R226	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R227	RG006270	Carbon Resistor (chip)	2.7K				
	R228	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R229	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	-231	RG007180	Carbon Resistor (chip)	18K 0.1 J				
*	R232	RF356390	Carbon Resistor (chip)	3.9K D 1608				
*	R233	RF356390	Carbon Resistor (chip)	3.9K D 1608				
	R234	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R235	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R302	V2440200	Metal Film Resistor	2.4K 1/4 F				01
	R303	V2440200	Metal Film Resistor	2.4K 1/4 F				01
*	R305	RG007150	Carbon Resistor (chip)	15K 0.1 J				
	R306	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R307	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R308	RF357470	Carbon Resistor (chip)	47.0K D 1608				
*	R309	RF357470	Carbon Resistor (chip)	47.0K D 1608				
	R310	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R311	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R312	RG005150	Carbon Resistor (chip)	150 0.1 J				
	R313	RG006820	Carbon Resistor (chip)	8.2K 0.1 J				
*	R314	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R315	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R316	RF356220	Carbon Resistor (chip)	2.2K D 1608				
*	R317	RF356220	Carbon Resistor (chip)	2.2K D 1608				
	R318	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R319	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R320	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R321	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R322	RG005680	Carbon Resistor (chip)	680				
	R323	RG005680	Carbon Resistor (chip)	680				
	R324	RG006270	Carbon Resistor (chip)	2.7K				
	R325	RG006270	Carbon Resistor (chip)	2.7K				
	R326	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R327	RG006270	Carbon Resistor (chip)	2.7K				
	R328	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R329	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	-331	RG007180	Carbon Resistor (chip)	18K 0.1 J				
*	R332	RF356390	Carbon Resistor (chip)	3.9K D 1608				
*	R333	RF356390	Carbon Resistor (chip)	3.9K D 1608				
	R334	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R335	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R401	RG008100	Carbon Resistor (chip)	100K 0.1 J				

*: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	R402	V2440200	Metal Film Resistor	2.4K 1/4 F				01
	R403	V2440200	Metal Film Resistor	2.4K 1/4 F				01
*	R404	VV276800	Flame Proof C. Resistor	100 1/4 J				01
*	R405	RG007150	Carbon Resistor (chip)	15K 0.1 J				
	R406	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R407	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R408	RF357470	Carbon Resistor (chip)	47.0K D 1608				
*	R409	RF357470	Carbon Resistor (chip)	47.0K D 1608				
	R410	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R411	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R412	RG005150	Carbon Resistor (chip)	150 0.1 J				
	R413	RG006820	Carbon Resistor (chip)	8.2K 0.1 J				
*	R414	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R415	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R416	RF356220	Carbon Resistor (chip)	2.2K D 1608				
*	R417	RF356220	Carbon Resistor (chip)	2.2K D 1608				
	R418	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R419	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R420	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R421	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R422	RG005680	Carbon Resistor (chip)	680				
	R423	RG005680	Carbon Resistor (chip)	680				
	R424	RG006270	Carbon Resistor (chip)	2.7K				
	R425	RG006270	Carbon Resistor (chip)	2.7K				
	R426	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R427	RG006270	Carbon Resistor (chip)	2.7K				
	R428	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R429	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	-431	RG007180	Carbon Resistor (chip)	18K 0.1 J				
*	R432	RF356390	Carbon Resistor (chip)	3.9K D 1608				
*	R433	RF356390	Carbon Resistor (chip)	3.9K D 1608				
	R434	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R435	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R502	V2440200	Metal Film Resistor	2.4K 1/4 F				01
	R503	V2440200	Metal Film Resistor	2.4K 1/4 F				01
*	R505	RG007150	Carbon Resistor (chip)	15K 0.1 J				
	R506	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R507	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R508	RF357470	Carbon Resistor (chip)	47.0K D 1608				
*	R509	RF357470	Carbon Resistor (chip)	47.0K D 1608				
	R510	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R511	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R512	RG005150	Carbon Resistor (chip)	150 0.1 J				
	R513	RG007180	Carbon Resistor (chip)	18K 0.1 J				
*	R514	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R515	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R516	RF356220	Carbon Resistor (chip)	2.2K D 1608				
*	R517	RF356220	Carbon Resistor (chip)	2.2K D 1608				
	R518	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R519	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R520	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R521	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R522	RG005680	Carbon Resistor (chip)	680				
	R523	RG005680	Carbon Resistor (chip)	680				
	R524	RG006270	Carbon Resistor (chip)	2.7K				
	R525	RG006270	Carbon Resistor (chip)	2.7K				
	R526	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R527	RG006270	Carbon Resistor (chip)	2.7K				
	R528	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R529	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	-533	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	R534	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	-536	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R537	RG006470	Carbon Resistor (chip)	4.7K 0.1 J				
	R538	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R602	V2440200	Metal Film Resistor	2.4K 1/4 F				01
	R603	V2440200	Metal Film Resistor	2.4K 1/4 F				01
*	R605	RG007150	Carbon Resistor (chip)	15K 0.1 J				
	R606	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R607	RG004100	Carbon Resistor (chip)	10 0.1 J				

*: New Parts

RANK: Japan only

	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
*	R608	RF357470	Carbon Resistor (chip)	47.0K D 1608				
*	R609	RF357470	Carbon Resistor (chip)	47.0K D 1608				
	R610	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R611	RG004100	Carbon Resistor (chip)	10 0.1 J				
*	R612	RG005150	Carbon Resistor (chip)	150 0.1 J				
	R613	RG007180	Carbon Resistor (chip)	18K 0.1 J				
*	R614	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R615	RF356820	Carbon Resistor (chip)	8.2K D 1608				
*	R616	RF356220	Carbon Resistor (chip)	2.2K D 1608				
*	R617	RF356220	Carbon Resistor (chip)	2.2K D 1608				
	R618	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R619	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R620	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R621	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R622	RG005680	Carbon Resistor (chip)	680				
	R623	RG005680	Carbon Resistor (chip)	680				
	R624	RG006270	Carbon Resistor (chip)	2.7K				
	R625	RG006270	Carbon Resistor (chip)	2.7K				
	R626	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R627	RG006270	Carbon Resistor (chip)	2.7K				
	R628	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R629	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	-633	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	R636	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R637	RG006470	Carbon Resistor (chip)	4.7K 0.1 J				
	R638	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R639	RG006100	Carbon Resistor (chip)	1.0K 0.1 J				
	R640	RG006100	Carbon Resistor (chip)	1.0K 0.1 J				
	R641	RG008470	Carbon Resistor (chip)	470K 0.1 J				
	R642	RG008470	Carbon Resistor (chip)	470K 0.1 J				
	R643	RG006470	Carbon Resistor (chip)	4.7K 0.1 J				
	R644	RG006470	Carbon Resistor (chip)	4.7K 0.1 J				
	R645	RG007470	Carbon Resistor (chip)	47K 0.1 J				
	R646	RG007470	Carbon Resistor (chip)	47K 0.1 J				
	R701	RG006820	Carbon Resistor (chip)	8.2K 0.1 J				
	R702	RG006820	Carbon Resistor (chip)	8.2K 0.1 J				
	R703	RG006150	Carbon Resistor (chip)	1.5K 0.1 J				
	R704	RG006150	Carbon Resistor (chip)	1.5K 0.1 J				
*	R705	RG006120	Carbon Resistor (chip)	1.2K 0.1 J				
*	R706	RG006120	Carbon Resistor (chip)	1.2K 0.1 J				
	R710	RG007180	Carbon Resistor (chip)	18K 0.1 J				
*	R711	RG007360	Carbon Resistor (chip)	36K 0.1 J				
*	R712	RG007360	Carbon Resistor (chip)	36K 0.1 J				
	R713	RG008220	Carbon Resistor (chip)	220K 0.1 J				
	R714	RG008100	Carbon Resistor (chip)	100K 0.1 J				
*	R716	RG008120	Carbon Resistor (chip)	120K 0.1 J				
*	R717	RG008120	Carbon Resistor (chip)	120K 0.1 J				
	R718	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	R719	RG005220	Carbon Resistor (chip)	220 0.1 J				
*	R720	RG006430	Carbon Resistor (chip)	4.3K 0.1 J				
	R721	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R724	RG006330	Carbon Resistor (chip)	3.3K 0.1 J				
	R725	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R726	RG006330	Carbon Resistor (chip)	3.3K 0.1 J				
	R727	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R728	RG006470	Carbon Resistor (chip)	4.7K 0.1 J				
*	R729	RG005750	Carbon Resistor (chip)	750 0.1 J				
	R730	RG007100	Carbon Resistor (chip)	10K 0.1 J				
*	R731	RG205680	Carbon Resistor (chip)	680 1/4 J				
*	-733	RG205680	Carbon Resistor (chip)	680 1/4 J				
	R734	RG005560	Carbon Resistor (chip)	560 0.1 J				
	R735	RG005560	Carbon Resistor (chip)	560 0.1 J				
	R737	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R738	RF357100	Carbon Resistor (chip)	10.0K D 1608				01
	R739	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R741	RG006910	Carbon Resistor (chip)	9.1K 0.1 J				
	R742	RG005100	Carbon Resistor (chip)	100 0.1 J				
	R751	RG005560	Carbon Resistor (chip)	560 0.1 J				
	-757	RG005560	Carbon Resistor (chip)	560 0.1 J				
	R761	RG007470	Carbon Resistor (chip)	47K 0.1 J				

*: New Parts

RANK: Japan only

	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	-768	RG007470	Carbon Resistor (chip)	47K 0.1 J				
	R771	RG007120	Carbon Resistor (chip)	12K 0.1 J				
	R772	RG007120	Carbon Resistor (chip)	12K 0.1 J				
	R773	RG004680	Carbon Resistor (chip)	68 0.1 J				
*	R774	RF357470	Carbon Resistor (chip)	47.0K D 1608				
*	R775	RF357560	Carbon Resistor (chip)	56.0K D 1608				
*	R776	RF357560	Carbon Resistor (chip)	56.0K D 1608				
*	R778	RF357180	Carbon Resistor (chip)	18.0K D 1608				
*	R779	RF357180	Carbon Resistor (chip)	18.0K D 1608				
	R780	RG004680	Carbon Resistor (chip)	68 0.1 J				
	R781	RG007270	Carbon Resistor (chip)	27K 0.1 J				
	R784	RG007470	Carbon Resistor (chip)	47K 0.1 J				
*	R785	RG005330	Carbon Resistor (chip)	330 0.1 J				
	R786	RG008390	Carbon Resistor (chip)	390K 0.1 J				
	R787	RG008390	Carbon Resistor (chip)	390K 0.1 J				
	R788	RG007820	Carbon Resistor (chip)	82K 0.1 J				
	R789	RG007220	Carbon Resistor (chip)	22K 0.1 J				
*	R790	RG206150	Carbon Resistor (chip)	1.5K 1/4W				
	R791	RG005220	Carbon Resistor (chip)	220 0.1 J				
*	R792	RG008330	Carbon Resistor (chip)	330K 0.1 J				
	R812	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	R813	RG008220	Carbon Resistor (chip)	220K 0.1 J				
	R814	RG008100	Carbon Resistor (chip)	100K 0.1 J				
*	R816	RG008120	Carbon Resistor (chip)	120K 0.1 J				
*	R817	RG008120	Carbon Resistor (chip)	120K 0.1 J				
	R818	RG007180	Carbon Resistor (chip)	18K 0.1 J				
	R819	RG005220	Carbon Resistor (chip)	220 0.1 J				
*	R820	RG006430	Carbon Resistor (chip)	4.3K 0.1 J				
	R821	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R824	RG006330	Carbon Resistor (chip)	3.3K 0.1 J				
	R825	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R826	RG006330	Carbon Resistor (chip)	3.3K 0.1 J				
	R827	RG007100	Carbon Resistor (chip)	10K 0.1 J				
	R828	RG006470	Carbon Resistor (chip)	4.7K 0.1 J				
*	R829	RG005750	Carbon Resistor (chip)	750 0.1 J				
	R830	RG007100	Carbon Resistor (chip)	10K 0.1 J				
*	R831	RG205680	Carbon Resistor (chip)	680 1/4 J				
*	-833	RG205680	Carbon Resistor (chip)	680 1/4 J				
	R834	RG005560	Carbon Resistor (chip)	560 0.1 J				
	R835	RG005560	Carbon Resistor (chip)	560 0.1 J				
	R851	RG005560	Carbon Resistor (chip)	560 0.1 J				
	-857	RG005560	Carbon Resistor (chip)	560 0.1 J				
	R861	RG007470	Carbon Resistor (chip)	47K 0.1 J				
	-868	RG007470	Carbon Resistor (chip)	47K 0.1 J				
*	R869	RG206270	Carbon Resistor (chip)	2.7K 1/4 J				
	R871	RG007120	Carbon Resistor (chip)	12K 0.1 J				
	R872	RG007120	Carbon Resistor (chip)	12K 0.1 J				
	R873	RG004680	Carbon Resistor (chip)	68 0.1 J				
*	R874	RF357470	Carbon Resistor (chip)	47.0K D 1608				
*	R875	RF357560	Carbon Resistor (chip)	56.0K D 1608				
*	R876	RF357560	Carbon Resistor (chip)	56.0K D 1608				
*	R878	RF357180	Carbon Resistor (chip)	18.0K D 1608				
*	R879	RF357180	Carbon Resistor (chip)	18.0K D 1608				
	R880	RG004680	Carbon Resistor (chip)	68 0.1 J				
	R881	RG007270	Carbon Resistor (chip)	27K 0.1 J				
	R884	RG007470	Carbon Resistor (chip)	47K 0.1 J				
*	R885	RG005330	Carbon Resistor (chip)	330 0.1 J				
	R886	RG008390	Carbon Resistor (chip)	390K 0.1 J				
	R887	RG008390	Carbon Resistor (chip)	390K 0.1 J				
	R888	RG007820	Carbon Resistor (chip)	82K 0.1 J				
	R889	RG007220	Carbon Resistor (chip)	22K 0.1 J				
*	R890	RG206150	Carbon Resistor (chip)	1.5K 1/4W				
	R891	RG005220	Carbon Resistor (chip)	220 0.1 J				
*	R892	RG008330	Carbon Resistor (chip)	330K 0.1 J				
	R900	RG004100	Carbon Resistor (chip)	10 0.1 J				
	R901	RG008100	Carbon Resistor (chip)	100K 0.1 J				
	R902	RG007220	Carbon Resistor (chip)	22K 0.1 J				
	R904	RG005220	Carbon Resistor (chip)	220 0.1 J				
*	R905	RG007150	Carbon Resistor (chip)	15K 0.1 J				
*	R906	RG007390	Carbon Resistor (chip)	39K 0.1 J				

*: New Parts

RANK: Japan only

	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	R907	**RG008100**	Carbon Resistor (chip)	100K 0.1 J				
	R908	**RG005560**	Carbon Resistor (chip)	560 0.1 J				
	R909	**RG005560**	Carbon Resistor (chip)	560 0.1 J				
	R910	**RG008470**	Carbon Resistor (chip)	470K 0.1 J				
	R911	**RG006470**	Carbon Resistor (chip)	4.7K 0.1 J				
	R912	**RG007270**	Carbon Resistor (chip)	27K 0.1 J				
	R913	**RG007270**	Carbon Resistor (chip)	27K 0.1 J				
	R914	**RG007680**	Carbon Resistor (chip)	68K 0.1 J				
	R915	**RG007680**	Carbon Resistor (chip)	68K 0.1 J				
*	R916	**RG206270**	Carbon Resistor (chip)	2.7K 1/4 J				
	R917	**RG205330**	Carbon Resistor (chip)	330 1/4 J				
	-925	**RG205330**	Carbon Resistor (chip)	330 1/4 J				
*	R926	**RG004180**	Carbon Resistor (chip)	18 0.1 J				
*	R928	**RF356390**	Carbon Resistor (chip)	3.9K D 1608				
*	R930	**RF357820**	Carbon Resistor (chip)	82.0K D 1608				
*	R934	**RG004180**	Carbon Resistor (chip)	18 0.1 J				
	R935	**RG205330**	Carbon Resistor (chip)	330 1/4 J				
*	R936	**RG004180**	Carbon Resistor (chip)	18 0.1 J				
	R938	**RF356390**	Carbon Resistor (chip)	3.9K D 1608				
	R940	**RF357820**	Carbon Resistor (chip)	82.0K D 1608				01
*	R944	**RG004180**	Carbon Resistor (chip)	18 0.1 J				
	R951	**RG000000**	Carbon Resistor (chip)	0 0.1 J				
	R952	**RG000000**	Carbon Resistor (chip)	0 0.1 J				
	SW101	**V6962600**	Push Switch			PAD (CH1)		02
	SW201	**V6962600**	Push Switch			PAD (CH2)		02
	SW301	**V6962600**	Push Switch			PAD (CH3)		02
	SW401	**V6962600**	Push Switch			PAD (CH4)		02
*	SW701	**V8059400**	Slide Switch	SS001P243OHcPA6		MAIN-MON, MAIN-MAIN, MAIN-BRIDGE		
	SW702	**V3483200**	Slide Switch	SS001P022BQcPA6		PHANTOM ON/OFF		03
	SW901	**VV056000**	Tact Switch	SKQNAED010		VOCAL ECHO 1		01
	SW902	**VV056000**	Tact Switch	SKQNAED010		VOCAL ECHO 2		01
	SW903	**VV056000**	Tact Switch	SKQNAED010		VOCAL REVERB 1		01
	SW904	**VV056000**	Tact Switch	SKQNAED010		VOCAL REVERB 2		01
	SW905	**VV056000**	Tact Switch	SKQNAED010		HALL 1		01
	SW906	**VV056000**	Tact Switch	SKQNAED010		HALL 2		01
	SW907	**VV056000**	Tact Switch	SKQNAED010		ROOM		01
	SW908	**VV056000**	Tact Switch	SKQNAED010		PLATE		01
	SW909	**VV056000**	Tact Switch	SKQNAED010		EFFECT ON		01
*	SW910	**V8058000**	Slide Switch	SS001P242BPcA6		YSP ON/OFF		
*	VR101	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		LOW (CH1)		
*	VR102	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		MID (CH1)		
*	VR103	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		HIGH (CH1)		
*	VR104	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		MONITOR (CH1)		
*	VR105	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		EFFECT (CH1)		
*	VR106	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		LEVEL (CH1)		
*	VR201	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		LOW (CH2)		
*	VR202	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		MID (CH2)		
*	VR203	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		HIGH (CH2)		
*	VR204	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		MONITOR (CH2)		
*	VR205	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		EFFECT (CH2)		
*	VR206	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		LEVEL (CH2)		
*	VR301	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		LOW (CH3)		
*	VR302	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		MID (CH3)		
*	VR303	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		HIGH (CH3)		
*	VR304	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		MONITOR (CH3)		
*	VR305	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		EFFECT (CH3)		
*	VR306	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		LEVEL (CH3)		
*	VR401	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		LOW (CH4)		
*	VR402	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		MID (CH4)		
*	VR403	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		HIGH (CH4)		
*	VR404	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		MONITOR (CH4)		
*	VR405	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		EFFECT (CH4)		
*	VR406	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		LEVEL (CH4)		
*	VR501	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		LOW (CH5)		
*	VR502	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		MID (CH5)		
*	VR503	**V8264700**	Rotary Variable Resistor	B 50.0K XV09213P		HIGH (CH5)		
*	VR504	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		MONITOR (CH5)		
*	VR505	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		EFFECT (CH5)		
*	VR506	**V8264600**	Rotary Variable Resistor	A 20.0K XV09213P		LEVEL (CH5)		

*: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
*	VR601	V8264700	Rotary Variable Resistor	B 50.0K XV09213P		LOW (CH6)		
*	VR602	V8264700	Rotary Variable Resistor	B 50.0K XV09213P		MID (CH6)		
*	VR603	V8264700	Rotary Variable Resistor	B 50.0K XV09213P		HIGH (CH6)		
*	VR604	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		MONITOR (CH6)		
*	VR605	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		EFFECT (CH6)		
*	VR606	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		LEVEL (CH6)		
*	VR701	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		AUX IN		
*	VR702	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		2TR IN (MAIN)		
*	VR703	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		MASTER (MAIN)		
	VR704	VV044600	Slide Variable Resistor	RS20H11KD017-YL		125 (MAIN)		
	VR705	VV044600	Slide Variable Resistor	RS20H11KD017-YL		250 (MAIN)		
	VR706	VV044600	Slide Variable Resistor	RS20H11KD017-YL		500 (MAIN)		
	VR707	VV044600	Slide Variable Resistor	RS20H11KD017-YL		1k (MAIN)		
	VR708	VV044600	Slide Variable Resistor	RS20H11KD017-YL		2k (MAIN)		
	VR709	VV044600	Slide Variable Resistor	RS20H11KD017-YL		4k (MAIN)		
	VR710	VV044600	Slide Variable Resistor	RS20H11KD017-YL		8k (MAIN)		
*	VR802	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		2TR IN (MONITOR)		
*	VR803	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		MASTER (MONITOR)		
	VR804	VV044600	Slide Variable Resistor	RS20H11KD017-YL		125 (MONITOR)		
	VR805	VV044600	Slide Variable Resistor	RS20H11KD017-YL		250 (MONITOR)		
	VR806	VV044600	Slide Variable Resistor	RS20H11KD017-YL		500 (MONITOR)		
	VR807	VV044600	Slide Variable Resistor	RS20H11KD017-YL		1k (MONITOR)		
	VR808	VV044600	Slide Variable Resistor	RS20H11KD017-YL		2k (MONITOR)		
	VR809	VV044600	Slide Variable Resistor	RS20H11KD017-YL		4k (MONITOR)		
	VR810	VV044600	Slide Variable Resistor	RS20H11KD017-YL		8k (MONITOR)		
*	VR901	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		EFFECT RTN (MONITOR)		
*	VR902	V8264600	Rotary Variable Resistor	A 20.0K XV09213P		EFFECT RTN (MAIN)		
*		AAX32870	Circuit Board	PWR B66 1/4		J, U (V826870) (X0623B0)		
*		AAX32880	Circuit Board	PWR B66 1/4		H, A (V826890) (X0623B0)		
*		AAX32890	Circuit Board	PWR B66 2/4		(V826870) (X0623B0)		
*		AAX32900	Circuit Board	PWR B66 3/4		J (V826780) (X0623B0)		
*		AAX32910	Circuit Board	PWR B66 3/4		U (V826880) (X0623B0)		
*		AAX32920	Circuit Board	PWR B66 3/4		H, A (V826890) (X0623B0)		
*		AAX32930	Circuit Board	PWR B66 4/4		(V826870) (X0623B0)		
		--	Jumper Wire	0.60 TP		(V829020)		
		--	Wiring Assembly	SGND		(V842670)		
		--	Jumper Wire	0.60		(VV29140)		
		VV319600	Fuse Holder	CQ-05CT				
*	C101	UR896220	Electrolytic Cap.	2.2 100.0V				
*	-104	UR896220	Electrolytic Cap.	2.2 100.0V				
	C105	UR838100	Electrolytic Cap.	100.00 16.0V				
	C106	UR838100	Electrolytic Cap.	100.00 16.0V				
	C107	FU451680	Mica Capacitor	68P 500V J				
	C108	FU451680	Mica Capacitor	68P 500V J				
	C109	FU451820	Mica Capacitor	82P 500V J				
	C110	FU451820	Mica Capacitor	82P 500V J				
	C111	V6185400	Capacitor	3300P 400V J.U.C.S		U, H		
⚠	C112	V6185400	Capacitor	3300P 400V J.U.C.S		U, H		
⚠	C113	UR877100	Electrolytic Cap.	10.00 63.0V				
	C114	UR877100	Electrolytic Cap.	10.00 63.0V				
	C115	VZ354000	Ceramic Capacitor-F	0.0100 50V Z				
	C116	VZ353900	Ceramic Cap.-B	1000P 50V K				
	C117	VZ353900	Ceramic Cap.-B	1000P 50V K				
	C118	V6113500	Capacitor	1000P 400V J.U.C.S				
⚠	C119	V0039700	Capacitor	0.1 275V UCS				
⚠	C120	UA953220	Mylar Capacitor	2200P 50V J				
	C121	V4567500	Ceramic Capacitor-SL	10P 500V K				
	C122	V4567500	Ceramic Capacitor-SL	10P 500V K				
	C123	VZ354600	Monolithic Ceramic Cap.	0.10 50V Z				
	C124	VZ354600	Monolithic Ceramic Cap.	0.10 50V Z				
	C125	V3280500	Ceramic Capacitor-B	100P 500 K				
	C126	VZ353500	Ceramic Capacitor-SL	100P 50V J				
	C127	UR877100	Electrolytic Cap.	10.00 63.0V				
	C128	UR877100	Electrolytic Cap.	10.00 63.0V				
	C129	VZ354000	Ceramic Capacitor-F	0.0100 50V Z				
	C130	VZ354600	Monolithic Ceramic Cap.	0.10 50V Z				
	C131	V4567500	Ceramic Capacitor-SL	10P 500V K				
	C132	VZ354600	Monolithic Ceramic Cap.	0.10 50V Z				

*: New Parts

RANK: Japan only

	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	C133	V4567500	Ceramic Capacitor-SL	10P 500V K				
	C134	UR828470	Electrolytic Cap.	470.00 10.0V				01
	C135	UR857470	Electrolytic Cap.	47.00 35.0V				01
	C136	VZ353900	Ceramic Cap.-B	1000P 50V K				01
	C137	VZ353900	Ceramic Cap.-B	1000P 50V K				01
	C138	VZ353500	Ceramic Capacitor-SL	100P 50V J				01
	C139	UR877100	Electrolytic Cap.	10.00 63.0V				01
	C140	UA953220	Mylar Capacitor	2200P 50V J				01
	C141	UR877100	Electrolytic Cap.	10.00 63.0V				01
*	-144	UR877100	Electrolytic Cap.	10.00 63.0V				01
*	C145	UR896220	Electrolytic Cap.	2.2 100.0V				
	C146	UR896220	Electrolytic Cap.	2.2 100.0V				
	C147	V5482000	Electrolytic Cap.	1000 35.0V				
	C148	V5482000	Electrolytic Cap.	1000 35.0V				
	C149	V3280500	Ceramic Capacitor-B	100P 500 K				01
	C150	V3280500	Ceramic Capacitor-B	100P 500 K				01
	C151	V5482000	Electrolytic Cap.	1000 35.0V				
	-153	V5482000	Electrolytic Cap.	1000 35.0V				
	C154	VY897000	Electrolytic Cap.	6800 100V				08
	C155	VY897000	Electrolytic Cap.	6800 100V				08
	C156	UR896470	Electrolytic Cap.	4.7 100.0V				
	C159	VV082200	Polyester Film Cap.	3.3000 100V M				03
	C160	VV082200	Polyester Film Cap.	3.3000 100V M				03
*	C161	V3148500	Polyester Film Cap.	0.33 250V M				01
*	C162	UR896220	Electrolytic Cap.	2.2 100.0V				
	C163	UR896220	Electrolytic Cap.	2.2 100.0V				
	C164	V3148500	Polyester Film Cap.	0.33 250V M				01
	C165	UR866100	Electrolytic Cap.	1.00 50.0V				01
	C166	VZ354300	Ceramic Capacitor-E	0.0022 500 M				01
	C167	VZ354300	Ceramic Capacitor-E	0.0022 500 M				01
	C168	V5307900	Electrolytic Cap.	100 100.0V				
	C169	V5307900	Electrolytic Cap.	100 100.0V				
	C170	UR877100	Electrolytic Cap.	10.00 63.0V				01
	C171	UR877100	Electrolytic Cap.	10.00 63.0V				01
	C172	UA953220	Mylar Capacitor	2200P 50V J				01
	C173	UA953220	Mylar Capacitor	2200P 50V J				01
	CN101	V3765300	Connector Base Post	M24185XX 15 TE				
⚠	CN102	V5817000	AC Inlet	HF-301L				02
	CN104	LB933030	Base Post Connector	VH- 3P SE				01
	CN105	VV066200	Connector Base Post	M2426XX 2P TE				01
	CN106	LB932060	Base Post Connector	VH- 6P TE				01
	CN107	LB933030	Base Post Connector	VH- 3P SE				01
	D101	VD631600	Diode	1SS133,176,HSS104				01
	-108	VD631600	Diode	1SS133,176,HSS104				01
	D109	VG437700	Zener Diode	MTZ J 5.6B 5.6V				01
	D110	VQ469600	Diode	HSS82				01
	D111	VG437700	Zener Diode	MTZ J 5.6B 5.6V				01
	D112	VD631600	Diode	1SS133,176,HSS104				01
	D113	VD631600	Diode	1SS133,176,HSS104				01
	D114	VQ469600	Diode	HSS82				01
	-117	VQ469600	Diode	HSS82				01
	D118	VN478200	Diode	D1NL20U				01
	D119	VN478200	Diode	D1NL20U				01
	D120	VU801600	Diode	1N4004L 26				01
	D121	VU801600	Diode	1N4004L 26				01
	D122	VD631600	Diode	1SS133,176,HSS104				01
	-125	VD631600	Diode	1SS133,176,HSS104				01
	D126	VU801600	Diode	1N4004L 26				01
	D127	VG437700	Zener Diode	MTZ J 5.6B 5.6V				01
	D128	VD631600	Diode	1SS133,176,HSS104				01
	D129	VG437700	Zener Diode	MTZ J 5.6B 5.6V				01
	D130	VQ469600	Diode	HSS82				01
	D131	VD631600	Diode	1SS133,176,HSS104				01
	D132	VD631600	Diode	1SS133,176,HSS104				01
	D133	VN478200	Diode	D1NL20U				01
	D134	VN478200	Diode	D1NL20U				01
	D135	VQ469600	Diode	HSS82				01
	-138	VQ469600	Diode	HSS82				01
	D139	VD631600	Diode	1SS133,176,HSS104				01
	D140	VU801600	Diode	1N4004L 26				01

*: New Parts

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	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	-143	VU801600	Diode	1N4004L 26				01
	D144	VG438900	Zener Diode	MTZ J 8.2B 8.2V				01
	D145	VU801600	Diode	1N4004L 26				01
	D146	VU801600	Diode	1N4004L 26				01
	D147	VR149700	Diode Stack	D8LD40 8.0A 400V				04
⚠	D148	VU801600	Diode	1N4004L 26				01
⚠	-150	VU801600	Diode	1N4004L 26				01
	D151	VR149700	Diode Stack	D8LD40 8.0A 400V				04
	D152	VU801600	Diode	1N4004L 26				01
⚠	D153	V2261600	Diode Stack	RBV-1306 13.0A 600				04
	D154	VU801600	Diode	1N4004L 26				01
	D155	VS135800	Diode Stack	FMX-22S 10.0A 200V				03
	D156	VS135800	Diode Stack	FMX-22S 10.0A 200V				03
	D157	VU801600	Diode	1N4004L 26				01
	E101	VV075700	Terminal Plate					01
	E102	VV075700	Terminal Plate					01
⚠	F101	KB001540	Fuse	12.00A UL		J L=30mm		04
⚠	F101	VS823400	Fuse	10.00A JUC		U L=20mm		01
⚠	F101	VV071800	Fuse	TSD 4A 250V SEMKO		H L=20mm		01
⚠	F102	VV070600	Fuse	TDS 2A 250V J/U/C		J, U		01
⚠	F102	VV071500	Fuse	TSD 2A 250V SEMKO		H,A		01
⚠	F103	VV070600	Fuse	TDS 2A 250V J/U/C		J, U		01
⚠	F103	VV071500	Fuse	TSD 2A 250V SEMKO		H,A		01
	IC101	XD853A00	IC	NJM7815FA		REGULATOR +15V		03
	IC102	XD854A00	IC	NJM7915FA		REGULATOR -15V		03
	IC103	XJ607A00	IC	NJM7805FA		REGULATOR +5V		02
	J101	--	Jumper Wire	0.60		(VV29140)		
*	J102	--	Jumper Wire	0.60		(VV29140)		
*	JK101	V8102300	Phone Jack	STJACK LJB0661		SPEAKERS A 1		
*	JK102	V8102300	Phone Jack	STJACK LJB0661		SPEAKERS A 2		
*	JK103	V8102300	Phone Jack	STJACK LJB0661		SPEAKERS BRIDGE		
*	JK104	V8102300	Phone Jack	STJACK LJB0661		SPEAKERS B 1		
	JK105	V8102300	Phone Jack	STJACK LJB0661		SPEAKERS B 2		
	L101	V4668300	Coil	OH-20 100UH				08
	L102	V4668300	Coil	OH-20 100UH				08
	L103	GE300670	Ferrite Bead	BL02RN2-R62T4				02
	L104	GE300670	Ferrite Bead	BL02RN2-R62T4				02
	L105	VR150900	Coil	RZ-001 21MM				02
	L106	VR150900	Coil	RZ-001 21MM				02
	PR101	VL965100	Positive Thermistor	PTH9M04BE222TS2				04
	PR102	VL964800	Positive Thermistor	PTH9M04BH222TS2				04
	Q101	IC1815M0	Transistor	2SC1815 Y,GR				01
	Q102	IA097030	Transistor	2SA970 GR,BL				01
	Q103	IC1815M0	Transistor	2SC1815 Y,GR				01
	Q104	IA097030	Transistor	2SA970 GR,BL				01
	Q105	IC224030	Transistor	2SC2240 GR,BL				01
	Q106	IC224030	Transistor	2SC2240 GR,BL				01
	Q107	IA097030	Transistor	2SA970 GR,BL				01
	-109	IA097030	Transistor	2SA970 GR,BL				01
	Q110	IC1815M0	Transistor	2SC1815 Y,GR				01
	Q111	IA097030	Transistor	2SA970 GR,BL				01
	Q112	IC1815M0	Transistor	2SC1815 Y,GR				01
	Q113	VU418400	Transistor	2SA1371 D,E				01
	Q114	VU418600	Transistor	2SC3468 D,E				01
	Q115	VU418400	Transistor	2SA1371 D,E				01
	Q116	VU418600	Transistor	2SC3468 D,E				01
	Q117	VU418600	Transistor	2SC3468 D,E				01
	Q118	VU418400	Transistor	2SA1371 D,E				01
	Q119	V2797700	Transistor	2SC5395 E,F				01
	Q120	V2797600	Transistor	2SA1993 E,F				01
	Q121	VU418600	Transistor	2SC3468 D,E				01
	Q122	VU418400	Transistor	2SA1371 D,E				01
	Q123	V2797700	Transistor	2SC5395 E,F				01
	Q124	VU418400	Transistor	2SA1371 D,E				01
	Q125	VU418600	Transistor	2SC3468 D,E				01
	Q126	V2797600	Transistor	2SA1993 E,F				01
	Q127	V2797700	Transistor	2SC5395 E,F				01
	-129	V2797700	Transistor	2SC5395 E,F				01
	Q130	V2797600	Transistor	2SA1993 E,F				01
	Q131	VU418600	Transistor	2SC3468 D,E				01

*: New Parts

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REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
Q132	VU418400	Transistor	2SA1371 D,E				01
Q133	VD678500	Digital Transistor	DTA114ES				01
Q134	VS883400	Transistor	2SD2394 E,F				02
Q135	V2797700	Transistor	2SC5395 E,F				01
Q136	VU418600	Transistor	2SC3468 D,E				01
Q137	VU418400	Transistor	2SA1371 D,E				01
Q201N	VR732800	Transistor	A1859A/C4883A				04
Q201P	VR732800	Transistor	A1859A/C4883A				04
Q202N	V5611000	Pair Transistor	A1386A/C3519A				05
Q202P	V5611000	Pair Transistor	A1386A/C3519A				05
Q203N	V5611000	Pair Transistor	A1386A/C3519A				05
Q203P	V5611000	Pair Transistor	A1386A/C3519A				05
Q204N	VR732800	Transistor	A1859A/C4883A				04
Q204P	VR732800	Transistor	A1859A/C4883A				04
Q205N	V5611000	Pair Transistor	A1386A/C3519A				05
Q205P	V5611000	Pair Transistor	A1386A/C3519A				05
Q206N	V5611000	Pair Transistor	A1386A/C3519A				05
Q206P	V5611000	Pair Transistor	A1386A/C3519A				05
Q207N	VR732800	Transistor	A1859A/C4883A				04
Q207P	VR732800	Transistor	A1859A/C4883A				04
Q208N	V5611000	Pair Transistor	A1386A/C3519A				05
Q208P	V5611000	Pair Transistor	A1386A/C3519A				05
Q209N	V5611000	Pair Transistor	A1386A/C3519A				05
Q209P	V5611000	Pair Transistor	A1386A/C3519A				05
Q210N	VR732800	Transistor	A1859A/C4883A				04
Q210P	VR732800	Transistor	A1859A/C4883A				04
Q211N	V5611000	Pair Transistor	A1386A/C3519A				05
Q211P	V5611000	Pair Transistor	A1386A/C3519A				05
Q212N	V5611000	Pair Transistor	A1386A/C3519A				05
Q212P	V5611000	Pair Transistor	A1386A/C3519A				05
Q213N	V5611000	Pair Transistor	A1386A/C3519A				05
Q213P	V5611000	Pair Transistor	A1386A/C3519A				05
R101	HF457470	Carbon Resistor	47.0K 1/4 J				01
R102	HF457220	Carbon Resistor	22.0K 1/4 J				01
R103	HF457220	Carbon Resistor	22.0K 1/4 J				01
R104	VV312800	Metal Film Resistor	680.0 1/4 F				01
R105	VV312800	Metal Film Resistor	680.0 1/4 F				01
R106	HF455560	Carbon Resistor	560.0 1/4 J				01
R107	HF455560	Carbon Resistor	560.0 1/4 J				01
R108	HF455100	Carbon Resistor	100.0 1/4 J				01
R109	HF455100	Carbon Resistor	100.0 1/4 J				01
R110	HF455560	Carbon Resistor	560.0 1/4 J				01
R111	HF455560	Carbon Resistor	560.0 1/4 J				01
R112	HF455100	Carbon Resistor	100.0 1/4 J				01
R113	HF455100	Carbon Resistor	100.0 1/4 J				01
R114	HF457470	Carbon Resistor	47.0K 1/4 J				01
R115	HF455560	Carbon Resistor	560.0 1/4 J				01
R116	HF455560	Carbon Resistor	560.0 1/4 J				01
R117	HF457470	Carbon Resistor	47.0K 1/4 J				01
R118	HF457470	Carbon Resistor	47.0K 1/4 J				01
R119	VV312900	Metal Film Resistor	22K 1/4 F				01
R120	VV312900	Metal Film Resistor	22K 1/4 F				01
R121	HF455330	Carbon Resistor	330.0 1/4 J				01
-124	HF455330	Carbon Resistor	330.0 1/4 J				01
R125	HF455220	Carbon Resistor	220.0 1/4 J				01
R126	HF455220	Carbon Resistor	220.0 1/4 J				01
R127	HF457470	Carbon Resistor	47.0K 1/4 J				01
-130	HF457470	Carbon Resistor	47.0K 1/4 J				01
R131	HF455560	Carbon Resistor	560.0 1/4 J				01
R132	HF455560	Carbon Resistor	560.0 1/4 J				01
R133	HF457120	Carbon Resistor	12.0K 1/4 J				01
R134	HF457120	Carbon Resistor	12.0K 1/4 J				01
R135	VV313800	Flame Proof C. Resistor	220.0 1/4 J				01
R136	VV313800	Flame Proof C. Resistor	220.0 1/4 J				01
R137	VZ009300	Flame Proof C. Resistor	330.0 1/4 J				01
R138	VZ009300	Flame Proof C. Resistor	330.0 1/4 J				01
R139	VV276800	Flame Proof C. Resistor	100 1/4 J				01
-142	VV276800	Flame Proof C. Resistor	100 1/4 J				01
R143	VZ009100	Flame Proof C. Resistor	33.0 1/4 J				01
R144	VZ009100	Flame Proof C. Resistor	33.0 1/4 J				01

*: New Parts

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REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
R145	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R146	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R147	V4833200	Wire Wound Resistor	0.22 5W K				01
R148	V4833200	Wire Wound Resistor	0.22 5W K				01
R149	VZ009100	Flame Proof C. Resistor	33.0 1/4 J				01
R150	VZ009100	Flame Proof C. Resistor	33.0 1/4 J				01
R151	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R152	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R153	VV058500	Flame Proof C. Resistor	10.0 1/4 J				01
R154	V4833200	Wire Wound Resistor	0.22 5W K				01
R155	V4833200	Wire Wound Resistor	0.22 5W K				01
R156	VV058500	Flame Proof C. Resistor	10.0 1/4 J				01
R157	HF458150	Carbon Resistor	150.0K 1/4 J				01
R158	VV058500	Flame Proof C. Resistor	10.0 1/4 J				01
R159	HF455220	Carbon Resistor	220.0 1/4 J				01
R160	HF455220	Carbon Resistor	220.0 1/4 J				01
R161	HF457470	Carbon Resistor	47.0K 1/4 J				01
-164	HF457470	Carbon Resistor	47.0K 1/4 J				01
R165	HF458150	Carbon Resistor	150.0K 1/4 J				01
R166	HF457100	Carbon Resistor	10.0K 1/4 J				01
R167	VV058500	Flame Proof C. Resistor	10.0 1/4 J				01
R168	HF457560	Carbon Resistor	56.0K 1/4 J				01
R169	HF455560	Carbon Resistor	560.0 1/4 J				01
R170	HF455560	Carbon Resistor	560.0 1/4 J				01
R171	HF457120	Carbon Resistor	12.0K 1/4 J				01
R172	HF457120	Carbon Resistor	12.0K 1/4 J				01
R173	HF457100	Carbon Resistor	10.0K 1/4 J				01
R174	VZ009300	Flame Proof C. Resistor	330.0 1/4 J				01
R175	VZ009300	Flame Proof C. Resistor	330.0 1/4 J				01
R176	HF457100	Carbon Resistor	10.0K 1/4 J				01
R177	HF456220	Carbon Resistor	2.2K 1/4 J				01
R178	VV276800	Flame Proof C. Resistor	100 1/4 J				01
R179	VV313800	Flame Proof C. Resistor	220.0 1/4 J				01
R180	VV276800	Flame Proof C. Resistor	100 1/4 J				01
R181	HF457100	Carbon Resistor	10.0K 1/4 J				01
R182	VV313800	Flame Proof C. Resistor	220.0 1/4 J				01
R183	VV276800	Flame Proof C. Resistor	100 1/4 J				01
R184	VV276800	Flame Proof C. Resistor	100 1/4 J				01
R185	VZ009100	Flame Proof C. Resistor	33.0 1/4 J				01
R186	VZ009100	Flame Proof C. Resistor	33.0 1/4 J				01
R187	HF457120	Carbon Resistor	12.0K 1/4 J				01
R188	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R189	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R190	V4833200	Wire Wound Resistor	0.22 5W K				01
R191	V4833200	Wire Wound Resistor	0.22 5W K				01
R192	VZ009100	Flame Proof C. Resistor	33.0 1/4 J				01
R193	VZ009100	Flame Proof C. Resistor	33.0 1/4 J				01
R194	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R195	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R196	V4833200	Wire Wound Resistor	0.22 5W K				01
R197	V4833200	Wire Wound Resistor	0.22 5W K				01
R198	VV313800	Flame Proof C. Resistor	220.0 1/4 J				01
R199	HF455100	Carbon Resistor	100.0 1/4 J				01
R200	VV313800	Flame Proof C. Resistor	220.0 1/4 J				01
R201	HF456220	Carbon Resistor	2.2K 1/4 J				01
R202	HF457560	Carbon Resistor	56.0K 1/4 J				01
R203	HF456560	Carbon Resistor	5.6K 1/4 J				01
R204	HF456560	Carbon Resistor	5.6K 1/4 J				01
R205	HF457120	Carbon Resistor	12.0K 1/4 J				01
R206	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R207	VZ008700	Flame Proof C. Resistor	2.2K 1/4 J				01
R208	VZ008600	Flame Proof C. Resistor	150.0 1/4 J				01
R209	VZ008800	Flame Proof C. Resistor	22.0 1/4 J				01
R210	VZ008600	Flame Proof C. Resistor	150.0 1/4 J				01
R211	VZ008700	Flame Proof C. Resistor	2.2K 1/4 J				01
R212	VV313600	Flame Proof C. Resistor	2.2 1/4 J				01
R213	VV313600	Flame Proof C. Resistor	2.2 1/4 J				01
R214	VZ370200	Wire Wound Resistor	0.1 5W K				01
R215	VV313600	Flame Proof C. Resistor	2.2 1/4 J				01
R216	VV313600	Flame Proof C. Resistor	2.2 1/4 J				01

*: New Parts

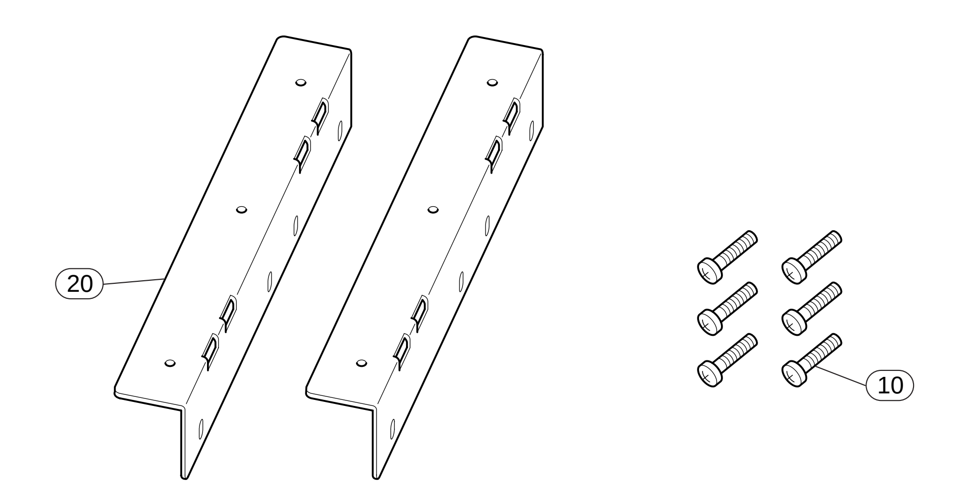
RANK: Japan only

	REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	R217	**VZ370200**	Wire Wound Resistor	0.1 5W K				01
	R218	**VV313600**	Flame Proof C. Resistor	2.2 1/4 J				01
	R219	**VZ370200**	Wire Wound Resistor	0.1 5W K				01
	R220	**VV313600**	Flame Proof C. Resistor	2.2 1/4 J				01
	R221	**VZ370200**	Wire Wound Resistor	0.1 5W K				01
	R222	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
	-225	**VV276700**	Flame Proof C. Resistor	4.7 1/4 J				01
	R226	**VV313600**	Flame Proof C. Resistor	2.2 1/4 J				01
	-231	**VV313600**	Flame Proof C. Resistor	2.2 1/4 J				01
	R232	**VV313900**	Flame Proof C. Resistor	680.0 1/4 J				01
	R233	**VV313900**	Flame Proof C. Resistor	680.0 1/4 J				01
	RY101	**VV315400**	Relay	DC OSA-SH-224DM3M				06
	RY102	**VV315400**	Relay	DC OSA-SH-224DM3M				06
⚠	SW101	**VY898100**	Push Switch	SDDFA3107U-YL UCS		POWER ON/OFF		05
	W101	--	Connector Assembly	B&B4P		(V827270)		
*	W101a	**V3225000**	Ferrite Core	FR25/15/12-D40				03
	W102	**V8272900**	Connector Assembly	PSW				
	W103	--	Connector Assembly	B&B1P		(V855290)		
*								
⚠ *		**X2294A00**	Power Transformer			J		
⚠ *		**X2295A00**	Power Transformer	UL		U, V		
⚠ *		**X2296A00**	Power Transformer	CE A		H, B, W		
⚠		**X2297A00**	Power Transformer	AS A		A		
		V6147300	Fan	3110GLB5WB50H02				08

*: New Parts

RANK: Japan only

■ RK-88 RACK MOUNT KIT



REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
		RACK MOUNT KIT			RK-88		
10	VB132700	Bind Head Screw	4.0X12 MFZN2BL			6	01
20	--	Rack Angle			(V840830)	2	

*: New Parts

RANK: Japan only